



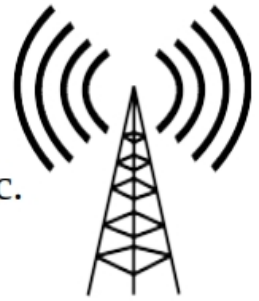
MEMBER

Printed Circuit

– Mar/Apr 2023 –

Published by the Southwest Iowa Amateur Radio Club Inc.

SWIARC meets the 4th Thursday of every month at the Loess Hills Red Cross Chapter
Charles E. Lakin Human Services Campus
705 N. 16th Street Council Bluffs, IA 51501



Visit us at <http://www.swiradio.org>



Did My Coax Freeze?

Spring Checkup Time

Provided by Rich WA0ZQG
article from ABR Industries

<https://abrind.com>



Although it seems like a simple question “Can my coax freeze?”, the answer is not as easy. Different cables have different ratings. For example, outdoor rated coax has a temperature rating of -20C (-4F) to +80C (+176F), while PTFE (Teflon™) has a temperature range of -90C (-130) to +260C (+500F). Yet in practical applications, the situation can be very different.

Most of the freeze issues are due to one primary culprit *water*. It’s everywhere and affects everything and unfortunately coax is not excluded from this. Water on coax can easily come from the ways you would expect like rain, snow, and humidity. It can also come in less common ways such as poor drainage when fed through PVC pipe, through ponding on the ground or rooftop collection. Whether traditional or non-traditional, all can have effects on coax when formed into ice.

Cont. Page 2



The Action 2023

- Mar 4th 8am-12pm **SouthWest Iowa ARC Hamfest**
McClelland, Iowa
- Mar 4,11, 18, 25 8-930am **Saturday Breakfast**
Sugars Diner*
- Mar 23 7-8pm **SWIARC Club Meeting**
Red Cross Building*
- Apr 1, 8, 15, 22, 29 8-930am **Saturday Breakfast**
Sugars Diner*
- Apr 1 9-1030am **Heartland Hams Monthly Breakfast**
Tobey Jacks Mineola Steak House*
- Apr 27 7-8pm **SWIARC Club Meeting**
Red Cross Building*
- May 13th **Nebraska ARRL Convention in Lincoln NE**
See: <http://www.lincolnhamfest.org/>

ADDRESSES	Sugars Diner	Red Cross CB	Tobey Jacks
	2725 E	705 N. 16th	408 Main St,
	Kanesville Blvd,	Street	Mineola, IA
	Council Bluffs,	Council Bluffs,	51554
	IA 51503	IA 51501	

What: **SouthWest Iowa ARC Hamfest**

Where: McClelland Town Hall
117 Main Street
McClelland, Iowa 51548

ALPHA[®]
ANTENNA

Time: 8 AM to 12 PM



Admission: \$5.00

Table Rental: \$12.00...includes admission

Door Prizes:

- YAESU FT-5DR *must be present to win
- DX Engineering gift certificate,
- 2 ARRL gift certificates,
- N3JFP certificate,
- Alpha Antenna certificates



Drawings start at 9am and then top of each hour.

Did My Coax Freeze? cont from page 1

Ice can squeeze a jacket and possibly migrate the braid. It can also squeeze a smaller softer cable and change the impedance. Luckily, both examples are extreme cases. The most common challenge comes from the coax sagging under the additional weight of the Ice. Depending on the installation, coax is generally strung and loosely guided. For some it's because installation is the most practical and easiest to set up (i.e., a simple Dipole application). For others it can be due to the temporary nature of the set up and the need to be stealthy. So, what's the solution?

Prevention is key, since this is mostly a case-by-case situation for your installation needs. Try to keep coax in an elevated or pitched position to run off water. When installing in PVC make sure there are weep holes to run off excess moisture. And good common practice is to routinely examine the feedline.

If the coax does freeze or is frozen with water, let it thaw naturally then wipe down the cable with a dry microfiber cloth (we recommend a size of 12-inch x 6 inch or larger). **IMPORTANT**—do not apply a heat gun or dryer to the feedline because the thermal shock can cause other issues. Once the cable is dry then check the VSWR with a dummy load. If everything checks at 1.5:1 VSWR or less then nothing else is needed. If the VSWR value is higher than 1.5:1, the cable is developing a mismatch and will need to be replaced.

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SWIARC ONLINE

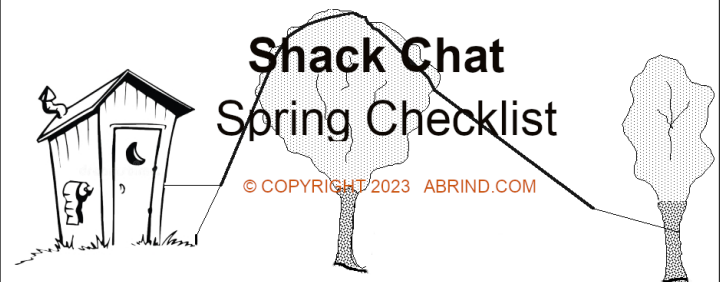


IMPORTANT REMINDER

SWIARC Club Dues \$20/year starting in 2023.
You may bring a check to any 4th Thursday club meeting, or send it to the club address.

SWIARC INC
PO BOX 661
COUNCIL BLUFFS IA 51502

Dues for students are half price!



Here's a simple checklist to go thru each spring to look for winter caused problems that will hinder your best effort at making that close or faraway contact.

1. Sweep the lines for high SWR.

Get out the antenna analyzer (borrow one from a fellow ham if you need to). Compare your today reading with last Season/Years Log Book (You do keep one?)

If the SWR looks good, move along to step 2. If higher than 1.5:1 or higher than your last Log entry you have a possible issue to check out.

2. Inspect the tower, mast, and guy lines.

If you have a tower, don't consider climbing it to inspect antennas until an evaluation of the tower and its support structure are checked.

Cont. Pg 3

SWIARC REPEATERS and NETS:

Club Repeaters

Primary Club Repeater: 2M @ 146.820 R- No PL

SWIARC digital C4FM 442.225 PL 136.5 Wires-X connected.

Club Nets

146.82 Tues. OPS Net 9:00 pm - 10:00 pm

146.82 Wed. Ragchew Net 9:00 pm - 10:00 pm

146.82 Sat. Swap Net 12:00 pm - 1:00 pm

More Local Nets here: <https://swiradio.org/ants/>
and

a clippable list on Page 5

SILENT KEY

Brian KM0Y, WB0AJI

December 14, 1953-January 21, 2023

Beloved husband, brother, father, host father to exchange students, and friend to many. Brian loved his church, traveling, meeting new people, newspapers, ham radio, gardening, cooking, languages, Scrabble, trivia and pocket protectors.

Brian worked a variety of short term jobs previous to receiving his law degree, including driving a truck for a summer wheat combine crew; security guard; radio station DJ; cafeteria cook; and law clerk.

He practiced law until 2017 as a corporate attorney, trust officer, and self-employed attorney. Brian kept busy during retirement volunteering on boards and with his many hobbies.

Preceded in death by brother, Kevan; parents, Fern and Richard. Survived by wife Sandy NOGWX; children Warren KBOJGL, Cecily, and Natalie; son-in-law Wayne; brothers Deran and Roban.

Celebrate Brian's life Sunday, January 29. 2 pm SERVICE followed by MINGLING until 4 pm at the German American Society, 3717 S 120th St. Memorials to the Christian Science Monitor Operating Fund or Legal Aid of Nebraska.

In His Own Words (from QRZ.com);

"I am a lawyer who has been hamming since 1969. On HF, you can find me operating in the CW subbands. My favorite band is 30M, where there is no SSB and no contests. I enjoy QRP and homebrewing. If you take a ham license exam at one of the Omaha VE sessions, you will probably see me there helping administer the tests. I QSL 100 per cent."

73 Brian

What is "Changes in the FCC RF Exposure Regulations"

mean to your shack?check the ARRL link out!

Learn whether these changes affect your station, and how you can easily evaluate it to comply with FCC regulations. But more amateur stations are required to conduct a "routine station evaluation" to determine that their station complies with the limits for human exposure.

Spring Checklist

Cont from Pg 2

If everything is safe and solid, then climb the tower (with proper equipment and ground crew) to inspect the antennas.

3. Inspect the antenna, mounts, and brackets.

Make sure there isn't any damage from ice or rapid freeze/thaw cycles. Tighten any loose bolts and screws. Inspect the weather proofing. Retape any connections if necessary.

4. Record Checklist Results in Logbook.

5. Don't forget to Smell the Flowers!

Have you a Spring Time Shack Checkup List?



Share your list with Shack Chat
newsletter@swiradio.org

Hams helping Hams

Rick KA0RLR was featured on KETV Ch 7 Sunday night

Local operator explains why he believes downed object may be Illinois club's radio balloon

[Check out the story on WWW.KETV.COM](http://WWW.KETV.COM) 📄

"Rick Rodgers is a local ham radio operator or someone who uses amateur radio station equipment to talk to people around the world.

Rodgers says his hobby has connected him with the 'Northern Illinois Bottlecap Balloon Brigade'. A group that has been getting national attention because they believe one of the unidentified objects shot down could potentially be theirs."

Click the Link above for the full story.

ARC Newsletter Publications from around the US.

This Name from the Traverse City, Mi ARC



February Club Meeting Presentation

Presented by Paul WB0GXD

This was a very detailed explanation of what is a Receiver Voting System and how it works.

So much detail it will be available thru the website, look for it when it is posted!



DE-MYSTIFYING THE LDG RVS-8 RECEIVER VOTING SYSTEM



**THE MOST MIS-UNDERSTOOD DEVICE
WITHIN THE KØSWI 82 REPEATER SYSTEM**

LDG RVS-8 VOTER

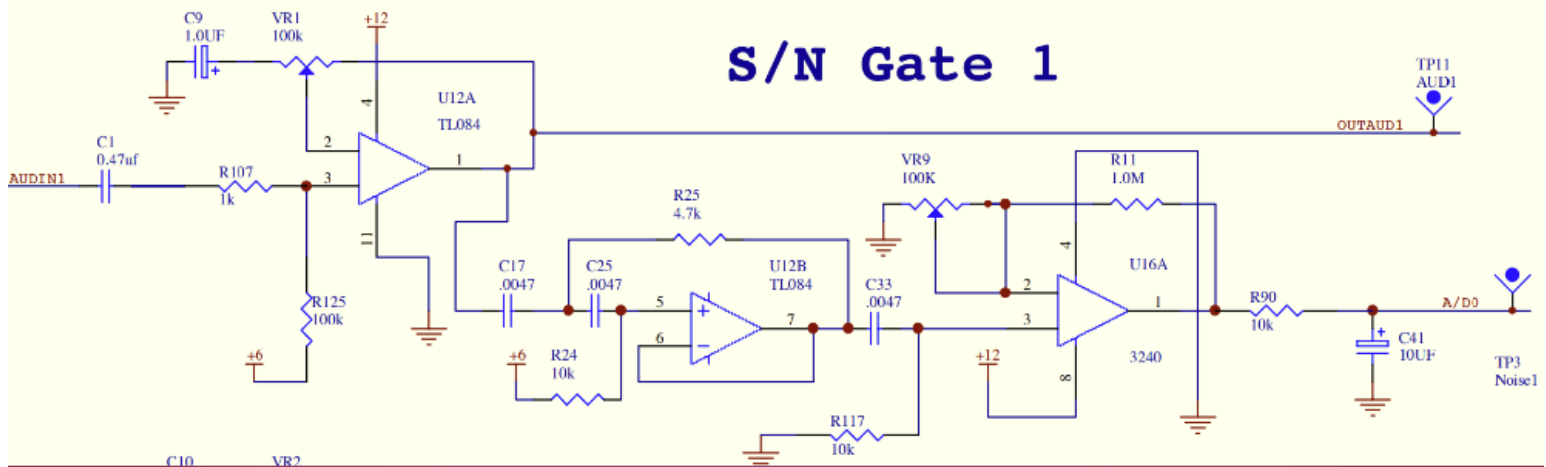
THERE ARE EIGHT OF THESE AUDIO BUFFER / SIGNAL PLUS NOISE CONVERTERS, ONE FOR EACH INPUT. WE ARE USING TWO, ONE FOR THE LOCAL RECEIVER AND ONE FOR THE REMOTE RECEIVER.

EACH OF THE ACTIVE CHANNELS PROVIDES A DC VOLTAGE REPRESENTING THE AMOUNT OF AUDIO (SIGNAL PLUS NOISE) ON THAT CHANNEL, AND SENDS THAT DC VOLTAGE TO THE MICROPROCESSOR SECTION.

EACH CHANNEL ALSO SENSES A VALID COR (CARRIER OPERATED RELAY) FROM THE ATTACHED RECEIVER AND FORWARDS IT TO THE MICROPROCESSOR SECTION.

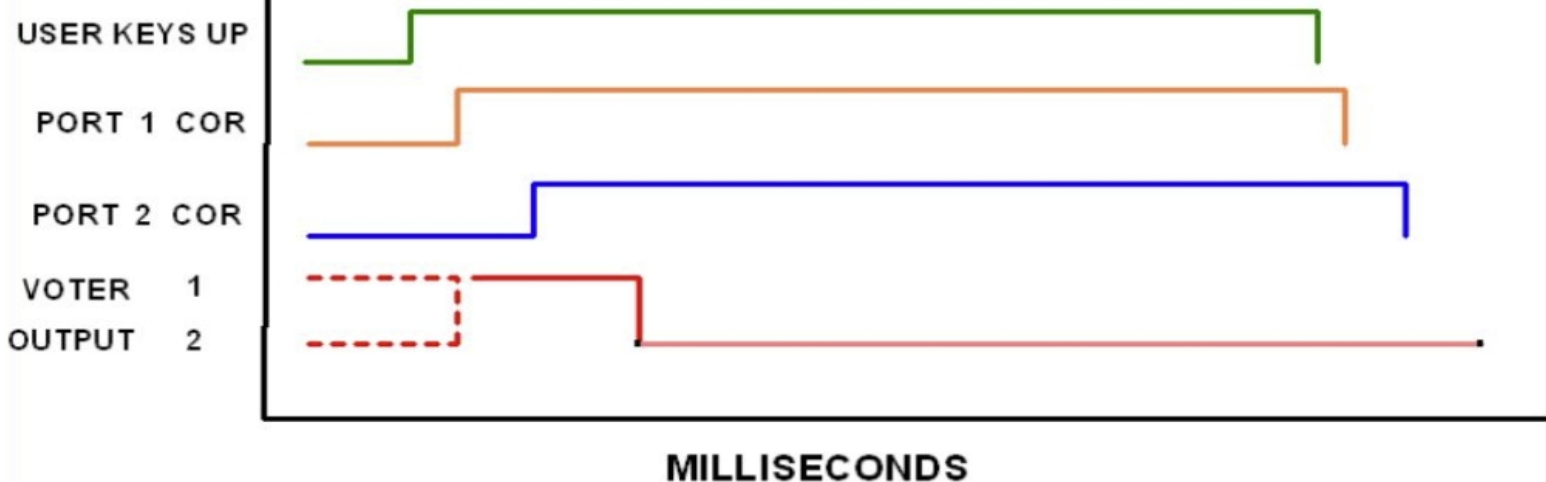
LDG RVS-8 VOTER

AUDIO BUFFERS / SIGNAL PLUS NOISE CONVERTERS (S/N) -



FOUNDATION OF THIS VOTER IS IT'S ABILITY TO MEASURE THE NOISE IN AN AUDIO SIGNAL AND PRESENT A DC VOLTAGE REPRESENTAION FOR COMPARISON AGAINST THE OTHER CHANNELS.

Voting Example



SCENERIO #2 –
 USER KEYS UP. NOISEY INTO RECEIVER 1, BUT FULL
 QUIETING INTO RECEVER 2.

Thanks to Paul again for an informative presentation!

March 23rd Meeting Presentation

EMCOM

by Rick KA0RLR

Want to present a small talk on a piece of your hobby

Contact Rick KA0RLR at rrodgers038@gmail.com

April 27th Meeting Presentation

Antenna Propagation Patterns

by Rich K0RWJ



Nebraska QSO Party Date 4/9/2023

Iowa QSO Party Date 9/16/2023

Welcome to the State QSO Party Challenge!

The 2023 State QSO Party Challenge and the “Worked All QSO Parties” awards programs will begin with the Vermont QSO Party at 0000z on February 4, 2023. Our last QSO Party of the year will be the Illinois QSO Party at 1700z on October 22, 2023. We’ll have a total of 47 QSO Party contests during the QSO Party contest season and we hope that you can participate in all of them.

The annual State QSO Party Challenge recognizes all radio amateurs’ participation in the U.S. State and Canadian Province QSO parties. It is open to any radio amateur who participates in any of the approved State QSO Parties (SQPs). Participants must simply submit their scores to 3830Scores.com to be included in the Challenge.

Participants are recognized for reaching five levels of achievement – Bronze, Silver, Gold, Platinum and Diamond. Using the submissions submitted to 3830Scores.com , each callsign’s cumulative score is calculated by totaling up his/her number of reported contacts and multiplying by the number of SQPs entered year-to-date. The use of the number of SQPs entered as a multiplier is to encourage radio amateurs to enter more state/province QSO parties. The use of the number of contacts as a metric is to encourage participants to operate longer in each SQP, increase the effectiveness of their station and improve their contesting skills. To qualify for an award level, the participant must have participated in at least two State QSO Parties.

Start Date	Start Time	State Website	Start Date	Start Time	State Website
2/5/2023	1600Z	British Columbia QSO Party	5/20/2023	1400Z	Arkansas QSO Party
2/25/2023	1500Z	South Carolina QSO Party	6/3/2023	1300Z	Kentucky QSO Party
2/26/2023	1500Z	North Carolina QSO Party	6/17/2023	1600Z	West Virginia QSO Party
3/11/2023	1500Z	Oklahoma QSO Party	8/12/2023	1400Z	Maryland-DC QSO Party
3/11/2023	1900Z	Idaho QSO Party	8/25/2023	0400Z	Hawaii QSO Party
3/12/2023	1500Z	Oklahoma QSO Party	8/26/2023	1600Z	Ohio QSO Party
3/12/2023	1800Z	Wisconsin QSO Party	8/26/2023	1400Z	Kansas QSO Party
3/18/2023	1400Z	Virginia QSO Party	8/27/2023	1400Z	Kansas QSO Party
3/19/2023	1200Z	Virginia QSO Party	9/2/2023	1300Z	Colorado QSO Party
4/1/2023	1400Z	Louisiana QSO Party	9/3/2023	1800Z	Tennessee QSO Party
4/1/2023	1400Z	Mississippi QSO Party	9/9/2023	1500Z	Alabama QSO Party
4/1/2023	1400Z	Missouri QSO Party	9/16/2023	1400Z	Texas QSO Party
4/2/2023	1400Z	Missouri QSO Party	9/16/2023	1400Z	Iowa QSO Party
4/8/2023	1300Z	Nebraska QSO Party	9/16/2023	1600Z	New Jersey QSO Party
4/8/2023	1400Z	New Mexico QSO Party	9/16/2023	1600Z	New Hampshire QSO Party
4/8/2023	1800Z	Georgia QSO Party	9/16/2023	1600Z	Washington St Salmon Run
4/8/2023	1800Z	North Dakota QSO Party	9/17/2023	1400Z	Texas QSO Party
4/9/2023	1300Z	Nebraska QSO Party	9/17/2023	1600Z	New Hampshire QSO Party
4/9/2023	1400Z	Georgia QSO Party	9/17/2023	1600Z	Washington St Salmon Run
4/15/2023	1800Z	Ontario QSO Party	10/7/2023	1600Z	California QSO Party
4/15/2023	1600Z	Michigan QSO Party	10/14/2023	1500Z	Arizona QSO Party
4/16/2023	1200Z	Ontario QSO Party	10/14/2023	1600Z	Pennsylvania QSO Party
4/16/2023	1200Z	Quebec QSO Party	10/14/2023	1800Z	South Dakota QSO Party
4/29/2023	1600Z	Florida QSO Party	10/14/2023	0300Z	Nevada QSO Party
4/30/2023	1200Z	Florida QSO Party	10/15/2023	1300Z	Pennsylvania QSO Party
5/6/2023	1300Z	7th Call Area QSO Party	10/21/2023	1400Z	New York QSO Party
5/6/2023	1500Z	Indiana QSO Party	10/22/2023	1700Z	Illinois QSO Party
5/6/2023	2000Z	New England QSO Party			

S.W.I.A.R.C.

Join the Club!

SWIARC club dues are \$20/year for 2023. You may bring a check to any 4th Thursday club meeting, or send it to the club address:

SWIARC INC.

PO BOX 661

COUNCIL BLUFFS IA 51502

Dues for students are half price per year.

Club Officers

President Derek W0TYG

president@swiradio.org

Vice President Rick KA0RLR

vicepresident@swiradio.org

Secretary Rich WA0ZQG

secretary@swiradio.org

Treasurer Greg N0GR

treasurer@swiradio.org

StationTrustee Chris KF0FBL

repeater@swiradio.org

Paul WB0GXD (Assistant)

Club Committees

Repeater Chris KF0FBL

repeater@swiradio.org

Paul WB0GXD (Assistant)

Field Day

fieldday@swiradio.org

Hamfest Derek W0TYG

hamfest@swiradio.org

Other Contacts

Ham Testing

testing@swiradio.org

Estate Sales Rick KA0RLR

estates@swiradio.org

Newsletter Rich K0RWJ

newsletter@swiradio.org



More Local Nets

Sunday

8:00 P.M	144.25 2M SSB	Heartland Hams
9:00 PM	146.94	Aksarben ARC

Monday

7:00 P.M.	145.29	Heartland Hams ARES informal net
08:00 PM	147.39 PL: 131.8	Bellevue ARC
09:00 PM	146.94	Aksarben ARC Chat Net

Tuesday

07:00 PM	147.36	QCWA Net, Chapter 210 (seasonal, October through March).
09:00 PM	146.82	K0SWI SWIARC Tuesday OPS Net

Wednesday

07:00 PM	146.67	Dodge Co. Ne. ARES
08:00 PM	147.39 PL 131.8	Mid-America Council Radio Scouting Net
09:00 PM	146.82	K0SWI SWIARC

Thursday

07:30 PM	145.31	Lincoln Ne. SATERN Net.
08:00 PM	28.35	10-Meter SSB Net.
08:00 PM	144.25	2-Meter Simplex U-SSB Net.
08:00 PM	146.36	Heartland DX Ass.
09:00 PM	28.305	10-Meter Net.

Friday

Saturday

09:00 AM	146.775	Pawnee ARC
12:00 PM	146.82	K0SWI SWIARC Swap Net
7:00 P.M	145.29	Heartland Hams Tech. net
08:30 PM	3.921.00	QCWA Chapter 20.

Want Other Nets listed ? Let me know, email newsletter@swiradio.org

Hey Fellow Hams

Let's put together a "Beacon" Lists for local Ham use ?

Send me your Beacon Knowledge and I will publish it in a future Printed Circuit issue. <mailto:newsletter@swiradio.org>



Looking for ANY SWIARC Club History

Thanks to
Paul WBOGXD for this nugget !

Dated April, 1972 Volume One Number 1

Published by the RADIO COMMUNICATIONS & ELECTRONICS TRAINING CLUB of SOUTHWEST IOWA
Club Station WA0YRS

A PARTY IS COMING UP

Les Young K0LHW has completed his big move into that new house and is looking for a tower. I have a hunch there is a place down in Florida way that is going to receive an order for one (50ft.) very soon. Les has engineered and helped most of the hams in our club raise, lower, or repair their towers, gear, or what have you. Why don't we all give Les a call and offer to help him anytime he is ready. I'll bet that new tower gets put up real soon..... W. Oden

Warren Richards K0BCG, and XYL Ruth will celebrate their 25th Wedding Anniversary on June 1st, 1972. They were married at Bethesda, Iowa in 1947. Congratulations to the Richards from all of us.

Jack (Barney) Barnett WA0CMK and Bob Stokes WA0OFW have opened their new business RACOMM (Radio Communications) at 21st & Broadway here in Council Bluffs. They not only repair all types of electronics equipment but they have a nice display of "Ham" gear for sale.

Warren Richards K0BCG has been elected President Elect of the CBEA (Council Bluffs Education Association).

FOR SALE

R.M.E Communications Transmitter for 6 & 2 meters. 38 watts AM and 48 watts CW. A good 10 element 2M antenna with 6 ft. roof mount. See (xxxxx) for details.

CQ.....DE..... Radio Communications & Electronics Training Club of Southwest Iowa
NEXT MEETING is 4-27-72..... at IWCC Lab B-19 at 8:00 pm

We are looking for any Articles, Stories and Pictures you may have regarding the Radio Communications & Electronics Training Club of Southwest Iowa (Original SWIARC Club Name). We would like to Archive or Print these in the Printed Circuit.



Submit an article to the SWIARC Newsletter

We encourage your involvement. Share your stories, wit, knowledge, experience, and upcoming events here. Submit your articles at a SWIARC Meeting, or to newsletter@swiradio.org or SWIARC PO Box 661 Council Bluffs, Iowa 51502. Please use this email address to also make requests for newsletter re-prints and your feedback of the newsletter.

SWIARC Mtg. 01/2023

Half an hour prior to the 7PM meeting, club Pres Derek TYG was setting up the Zoom mic and camera for Norm, Don AF, and Bob NE0CQ to check in. Here's the list of attendees:

Derek	W0TYG		
Keith	KE0AEP	Norm	WA0JYD
Don	W0AF	Kevin	N0MHK
Bruce	N0BHB	Joel	KE0QGD
Bob	NE0CQ	John	KB0QKH
Chris	KF0FBL	Rick	KA0RLR
Bill	KD0FJR	Rich	K0RWJ
Greg	N0GR	Dan	KB0TDW
Paul	WB0GXD	Craig	KD0YTI
Mark	KF0GVT	Rich	WA0ZQG
Rick	KF0IQI	(20)	

As per our recent resolution, the program went first with ZQG offering multiple meter test setups for comparison, 120VAC, 12VDC, and some others. It took a good 40 minutes.

Minutes from November (printed as part of the newsletter) were approved on a motion by GXD. Treasurer reported \$7,110 with some dues from the meeting added. He hasn't written a check since last July (for the P. O. Box rent).

Repeater

The VHF repeater on .82 isn't working well. Paul GXD and others will check out the remote site tomorrow (Friday). Main tower site has been sold and we have an access problem. Similarly, our backup Yaesu 7000 repeater, stored with Rea N0REA (SK) has yet to be returned. Rick RLR said, You know we have another repeater, right? (UHF on 442.225)

Late Note: Paul GXD said the link receiver at Simms St. site is OK, but the link transmitter at IWCC has an intermittent problem.

March 4 Hamfest

The Hamfest in **McClelland** is on schedule. All tables have been reserved (or requested), but if they are not claimed early (shortly after 8AM start) they may be offered to other vendors. Les WB0KFK (Kansas Farm Kid) of **D&L Antenna** will be our featured vendor. A five hundred dollar **Yaesu FT-5** H/T is the main door prize.

EmComm

Rick RLR proposes a program in March, close to the beginning of our tornadoe season. You need 3 guys for the main storm spotting team, one to watch the various radar displays full time, not distracted by the radio. No Old Business.

New Business

Rich ZQG, noting our reinvigorated newsletter (thanks Rich K0RWJ) offered to print and mail copies and said it'd cost (assuming 40 members) about \$50 a month. No one wanted it. We can all get it on SWIARC io groups or Emailed pdf.

Announcements

Don W0AF mentioned Winter Field Day the last weekend in January.

Norm JYD asked if anyone is going to do VE tests in Council Bluffs, and then mentioned a memorial for Brian KM0Y (SK) who has been an integral part of VE testing for years this Sunday in Omaha.

Paul GXD will do a program on the repeater voter next month (February meeting). Keith AEP will not be our F/Day Chmn this year.

We adjourned the meeting at 8:21 PM.

Minutes by Club Secretary,
Rich WA0ZQG

Program Review

Several people brought meters to compare readings. All the digital meters were within a one (1%) percent spread measuring Volts, milliamps, and a couple resistors.

Kevin N0MHK brought an H/P meter that reads out to 6 digits, also a 1 Volt standard (1.018030) and 100 Ohm reference. Kevin won best meter, and Joel KE0QGD with a Simpson 260, oldest and prettiest. Prizes were new Harbor Freight (red) meters.

Several people tested H/Ts on 146.52 against a fairly accurate OptoElectronics freq counter. The newer H/Ts appeared to be within 1-200 cycles.