

# **Printed Circuit**

- Mar/Apr 2024 -

Published by the Southwest Iowa Amateur Radio Club Inc.

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



#### Visit us at http://www.swiradio.org

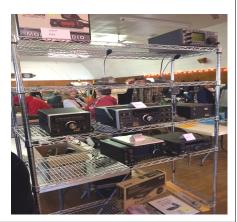
## SWIARC Hamfest 2024



Lots of activity going on at the yearly SWIARC Hamfest in McClelland, Iowa on the first Saturday in March. Over 100 amateur radio enthusiasts and at least one knitter browsed the sold out vendor tables looking for gold. If there was an empty table there might have been a knitted radio for sale!

Greeting everyone inside the front door was a great assortment of shack equipment. Prices were fair and negotiating was heavily practiced.

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### The Action 2024

Mar 2<sup>nd</sup>-30<sup>th</sup> Saturday Breakfast 8am-930am

Sugars Diner\*

Mar 2 **Heartland Hams Monthly Breakfast** 9-1030am **Tobey Jacks Mineola Steak House** 

Mar 28th **SWIARC Club Meeting** Red Cross Building\* 7-8pm

**Presentation: Station Evaluation** 

Apr 6th-27th Saturday Breakfast 8-930am Sugars Diner\*

**Heartland Hams Monthly Breakfast** Apr 6 9-1030am Tobey Jacks Mineola Steak House<sup>3</sup>

Apr 25 **SWIARC Club Meeting** 7-8pm Red Cross Building\*

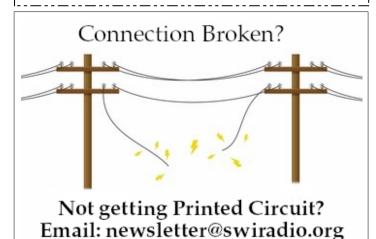
June 22-23 ARRL Field Day

### SILENT KEY- MARCH 9, 2024

Neil WBØEMU

WBØEMU Neil passed away last night at 7pm

#### Thanks Dan KBØTDW





### 991 Battery Woes

The day before Valentine's on the Tuesday Simplex Net at 7PM (147.435 S) Ron KR0N and Don W0AF were discussing their Yaesu 991 radios, and the difficulty changing the Lithium time and date battery.



Ron K-Ron works in electronics and has every type of desoldering tool available yet declined to open up his radio and change the battery because it's buried deep inside and only bothers the date and time display, *not the tuner memories*.

The battery is a 3V Lithium coil cell and is soldered in. According to some, Lithium coin cells can be partially recharged.

Both their radios are the earlier 991 model, not the A suffix versions, and both are about 8 years old (purchased around 2016). Don AF says the battery is only actively used when the radio is off, so either use it a lot or leave it turned on.

As told by Rich WA0ZQG a 991A Owner





What: ARRL FIELD DAY 2024

When: 2024 ARRL Field Day is June 22-23

Where: Lake Manawa

Time: 1800 UTC Saturday - 2059 UTC

Sunday.

What's New...

Dan KB0TDW is setting up a network for simple call logging using N3JFP's ARRL Field Day Contest Log App at the Lake Manawa location. Bring a Windows based computer with a wifi card or a network card and N3fjp software installed(No License Required, Activation will be done at Field Day) Email Dan TDW at dmcglone72@outlook.com for questions

Committee Chairman: Keith AEP



Eating the Spam is the Worse Part of the Project!

#### **Hamfest Cont from Pg 1**



Derek WØTYG and Craig KDØYTI were drawing winners all morning long!



Grand Prize Winner Dell KFONSP with his new Yaesu FTM-500D



Joel KEOQGD ran the Donation Drinks and Donut Stand



Les from D&L Antenna and all that good stuff





Thanks to Doug KA0MHJ for a view not normally seen!

Congratulations to Dale KD0NSP and all the Drawing Winners!

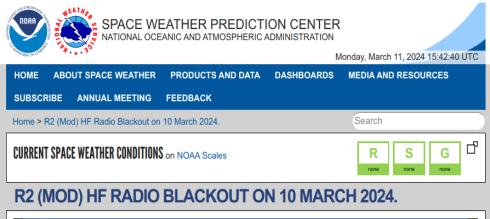
Next Year? But of course!

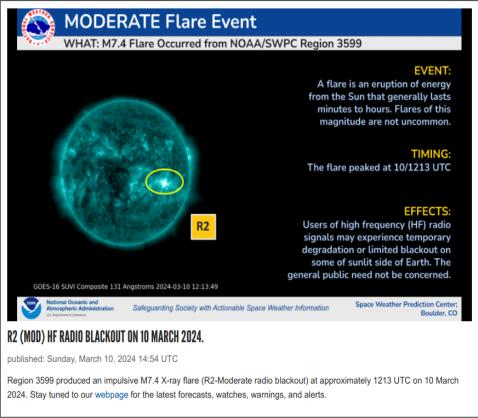
73's

### What Is Solar Weather

Did anyone experience the HF Radio Blackout that occurred on March 10, 2024, just a few days ago? Or how about the Radio Blackout Event on Dec 14<sup>th</sup> of last year. That one was the largest flare since Sept 2017!

In the next couple of issues we will highlight the interesting aspects of Solar Weather Forecasting. Let's start with our tax money funded National Oceanic and Atmospheric Administration(NOAA). **NOAA** is a part of the Department of Commerce. NOAA monitors and tracks such solar events as well as other Amateur Radio Enthusiasts. Their <a href="SPACE">SPACE</a>
WEATHER PREDICTION CENTER works with many .GOV agency's including NASA to monitor solar weather and it's affect on the Earth's atmosphere and hence radio wave propagation.





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

#### Join the Club!

SWIARC club dues are \$20/year for 2024. 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 Craig KD0YTI

vicepresident@swiradio.org

Secretary TBD

secretary@swiradio.org

Treasurer Rich WA0ZQG

treasurer@swiradio.org

StationTrustee Chris KF0FBL

repeater@swiradio.org

Paul WBØGXD (Assistant)

#### **Club Committees**

Repeater Chris KF0FBL

repeater@swiradio.org

Paul WBØGXD (Assistant)

Field Day

fieldday@swiradio.org

Hamfest Derek W0TYG

hamfest@swiradio.org

#### **Other Contacts**

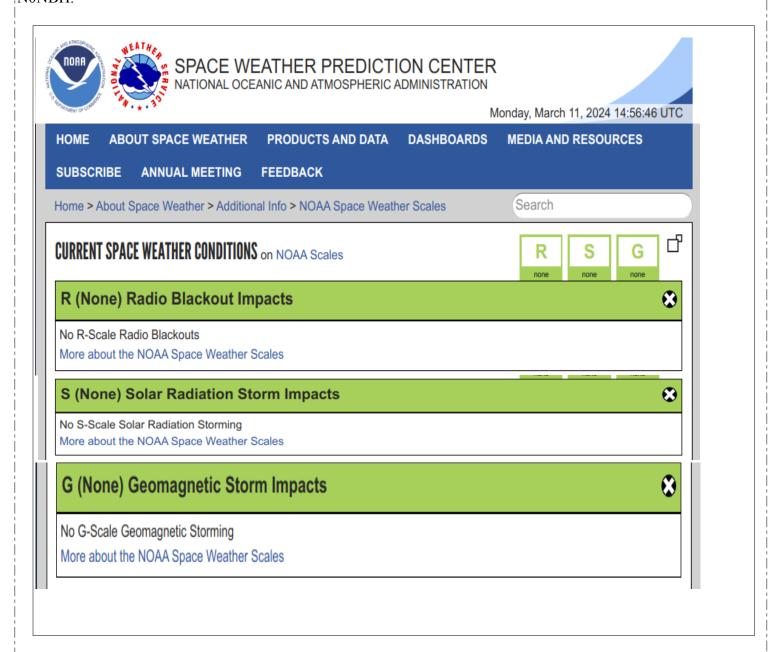
Ham Testing

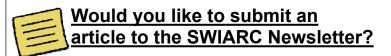
testing@swiradio.org

Newsletter Rich KORWJ newsletter@swiradio.org

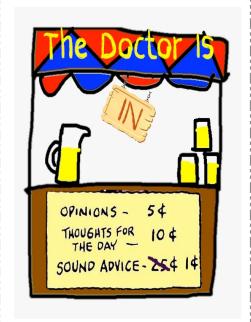
### What Is Solar Weather Cont.

The following info from the Space Weather Prediction Center website is a basic forecast of the sun activity. Next issue we will delve into probably the most viewed amateur radio club website Solar Weather Banner, by N0NBH.





We encourage your involvement. Share your stories, wit, knowledge, experience, and upcoming events here. Submit your articles at a SWIARC Meeting, or to <a href="mailto:newsletter@swiradio.org">newsletter@swiradio.org</a>



#### Dr. In,

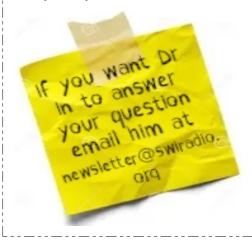
I thought about constructing this HOA Buster for my house.

"Hide a long wire antenna along with a strand of otherwise plain-looking christmas light string along the gutter. Who would know!"

My question is if I am transmitting morse code would the lights blink and let people read what I am saying?

#### Dear Conniver,

Yes, energy would be transferred both to the lights and the gutter if it is made of metal. Careful what you say!



#### **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



#### Sunday

02:00 PM 07:50 PM 09:00 PM	50.2 Mhz 144.25 2M USB Heartla 146.94 Aksarb	6 meter net and Hams oen ARC	
Monday 07:00 PM 08:00 PM 09:00 PM	145.29 147.39 PL: 131.8 146.94	Heartland Hams ARES in Bellevue ARC Aksarben ARC Chat Net	nformal net
Tuesday 07:00 PM 09:00 PM	147.36 (seasonal, October through 146.82	QCWA Net, Chapter 210 gh March). KØSWI SWIARC Tuesd	ay OPS Net
Wednesday 07:00 PM 08:00 PM 09:00 PM	146.67 147.39 PL 131.8 146.82	Dodge Co. Ne. ARES Mid-America Council KØSWI SWIARC	Radio Scouting Net
Thursday 07:30 PM 08:00 PM 08:00 PM 08:00 PM 09:00 PM	145.31 28.35 144.25 146.36 28.305	Lincoln Ne. SATERN Ne 10-Meter SSB Net. 2-Meter Simplex U-SSB Heartland DX Ass. 10-Meter Net.	•
Friday			
Saturday 09:00 AM	146.775 Pawne	e ARC	

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

146.82

145.29

3.921.00

12:00 PM

07:00 PM

08:30 PM

KØSWI SWIARC

QCWA Chapter 20.

Heartland Hams Tech. net

Swap Net

### Minutes 01/2024

Paul GXD was standing up, ready for the pledge a good 30 seconds before club Pres Derek TYG started it. Four of the 27 people attending were on Zoom (W0AF, FJR, QGD, and RLR).

Derek	WOTYG	Manny	KF01WE
w/Doug We	ndy Chris	Norm	<b>WAOJYD</b>
Keith	KE0AEP	Kevin	N0MHK
Don	WOAF	Dell	KF0NSP
Gerhard	NZ0B	Joel	KE 0QGD
and Elke	KF0KEH	John	KB0QKH
Bruce	NOBHB	Bob	K0RJE
Chris	KF0FBL	Rick	KA0RLR
Bill	KD0FJR	Rich	K0RWJ
Greg	N0GR	Dan	KB0TDW
Mark	KF0GVT	Dennis	WA0VJL
Paul	WB0GXD	Rich	WA0ZQG
Rick	KF01QL	(27)	

Program was the new requirement to calculate **Radiation Exposure** for your station. Our newsletter Editor, Rich RWJ had a slide show to help, explaining you need these four things, your (1) Max power (2) Freq (3) dBi of antenna, and (4) Mode, and the easy way to do it is an online calculator (search ARRL.org for **RF calculator**)



Sitting on your deck within a couple feet of the antenna might be a problem unless you take into account the radiation pattern might be mostly above the ground plane (see pic above).

Using 50W of FM and a 6.5 dBi antenna you need to keep people more than 5 or 8 ft away from the antenna. (Two categories depending on where your antenna is.)

John QKH, who works at Ch. 6 downtown asked, "Hey, what if it's 66kW 12 hundred feet up with a 15 dB gain antenna on 522 Mc?" The answer is 662 ft. or less than half way up the tower. Considering the other 2 TV stations and several FM transmitters in NW Omaha, you'd be well advised to go no closer than Dave N0JSB's house half a mile West of that commercial tower site.

#### **Business Meeting**

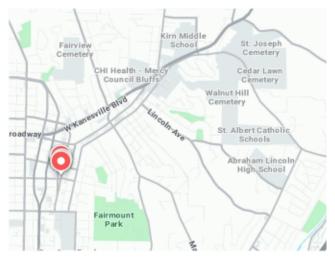
Minutes of our last meeting (November) were approved as printed, and the new Treasurer reported just a dollar more (\$2,780) in the bank. There were multiple transactions, in and out, with the net result nearly unchanged. The report was accepted, subject to audit.

These guys renewed their membership for 2024, giving twenty dollar bills to the Treasurer.

Bruce	N0BHB		
Chris	KF0FBL	Kevin NOMHK	
Mark	KF0GVT	Dell KF0NSP	
Rick	KF01QL	Rich KORWJ	
Manny	KF01WE	Dennis WA0VJI	ù

#### Repeater

Station Trustee Chris FBL said the UHF .225 is working well while the VHF .82 continues on the 'Lifeboat' system, both at Memorial Park a mile plus East of downtown Council Bluffs near St. Albert High School.



Map shows CoBlfs City Hall on left
to St Albert school right middle
Minutes continued next page --->

### Minutes 01/24 (cont.)

#### McClelland Hamfest

Usually the first Saturday in March, that's the 2<sup>nd</sup> day of the month this year, out at McClelland IA, 10 mi. East of Co/Blfs from 8AM to a little past Noon. Still five (\$5) bucks to get in and \$12 for tables.

Les KB0KFK of **D&L** Antenna will be there, and Joel QGD is handling the kitchen (coffee and doughnuts). Rick RLR says he'll bring a couple dozen doughnuts for the 'DX Coffee Shop'.

The main door prize is a five hundred dollar **Yaesu FTM 500** dual band mobile transceiver.

#### Field Day 2024

Keith AEP will be our F/Day Chairman this year. He did it for us 2 years ago at Lake Manawa, and then chaired Omaha last year (while we had no chairman and therefore, no F/Day event.) Keith says he wants to do it at **Manawa** again, and all without costing the club anything. Keith wants the emphasis on fun while also racking up a few points. He's also concerned about a safe venue and likes Manawa for that reason.

#### New Business

Don W0AF related a problem renewing his license which had expired. What used to be free for us is now thirty (\$35) five bucks, but in Don's case cost him seventy. Don't let your license expire!

Don also has a 2M contest to run, any mode, SSB included, with points for distance, but most importantly, has to be confirmed contacts and You are responsible for getting them confirmed. Don is finishing the rules with input from local clubs.

Club Pres Derek TYG again asked for a member to volunteer to be Secretary this year, but there was no response. (Last year's Sec'y said he will continue for a couple months only.)

#### Announcements

The USAF at Offutt AFB is scheduling a show for August 2024. Keith AEP and Don W0AF expressed interest in an information table as we did several years ago (before the Chinese virus).

Last time we were right next to a heavy duty outdoor speaker. It'd be nice to be in a quieter spot with a secure area for an antenna or two.

Greg N0GR and John QKH have together put up Greg's UHF repeater right next to John's work downtown at TV Ch. 6 where our .225 used to be although a few hundred feet lower atop the office building next door. It's 444.075 with a 136 PL tone. Good location for Omaha and CoBlfs.

Meeting adjourned 8:14PM.

Minutes by temp Sec'y, Rich WA0ZQG

### Minutes 02/2024

Club Pres Derek TYG had the Zoom video projected on a screen and began the pledge to the flag precisely at 7PM. Karin KD4DXX was one of those on Zoom. 28 people total.

Derek	WOTYG	Manny	KF01WE
w/couple	more guys	Norm	WA0JYD
Keith	KE0AEP	Kevin	N0MHK
Don	WOAF	Dell	KF0NSP
Gerhard	NZ0B	Joel	KE 0QGD
and Elke	list is	incomple	et.
Bruce	NOBHB	Bob	K0RJE
Chris	list is	really i	ncomplt
Bill	KD0FJR	Rich	K0RWJ
Greg	this is	not the	list
Mark	KF0GVT	Dennis	WA0VJL
Paul	WB0GXD	Rich	WA0ZQG
Rick	KF01QL	(28)	

Featured program was RT Systems software used to load memories in our modern digitally controlled radios. RT is owned by Karin DXX and her husband. CHIRP will load memories in many radios, but RT radio specific programs do more such as load default freqs for each band and limits for searches. They've supported 850 radios since the year 1990. Cost for a Yaesu 991 is \$25 for software and \$12 for the cable or thirty (\$35) for both. Greg N0GR testified that it worked well on one of his radios. Karin offered us a 10% discount with code SWIARC2024 through mid March.

The other program promoted on our website, testing a used Lithium battery by driving a nail into it, was spectacularly successful (out in the parking lot after the meeting). 30 seconds of warm looking fire followed by 30 seconds of intense fireworks. Imagine if you needed 370V rather than 3.7 and put together a hundred cells in series. Wow! Not unless they're properly shielded in a specifically constructed container well away from anything valuable.

Oh, and the IC-851 parts rig went to the first person who saw it, Steve ORU who has another 851 at home that suffered an underwater torture.

#### **Business Meeting**

Printed copies of Jan 2024 Minutes were read and approved, but we had to wait while Treasurer called the bank number to hear a \$2,960 balance, exactly \$180 more than last month due to 9 guys renewing (9 x \$20). Report subject to audit.

By mail and in person we received \$147 from:

Keith	KE0AEP
& Barb	KE0EGG
Brian	KF0CJE
Bill	KD0FJR
John	KB0QKH
Craig	KD0YTI

#### Field Day 2024

Keith AEP is our chairman and noted we may have to **buy** our food because Chris FBL who donated BBQ meat last time can't do it this time. (Keith wanted to do it all without club expense.)

He asks for volunteers before Noon Saturday and after 1PM Sunday to setup and take down. (It's weekend of June 22-23 this year. 1PM – 1PM.)

Keith says we'll probably have extra antennas so bring your rig and use ours. Also said verticals are thought to receive more noise, but last year it was the horizontal antennae that were noisy.

#### Repeater

Chris FBL said they (FBL, GXD, and QKH) fixed a no audio problem on .82 last month, and also found 2 noise sources bothering the county 800 Meg radios. (Only Hams could have done that at no charge to the county.) John QKH used one of his Spectrum Analyzers in the search for sources of the noise.

#### McClelland Hamfest

All (21) tables are sold and we're ready for it next week. We will try to accommodate vendors who forgot to reserve a table by selling them tables reserved by no-show vendors at 9AM.

### Minutes 02/2024 (cont.)

#### **Old Business**

No one spoke when Pres Derek TYG asked for a volunteer to be Club Sec'y. (Have to go to Post Office once in a while to get mail from our club **Box 661** address, and are supposed to have a copy of the Club Constitution at each meeting.) This is going to get interesting after the Hamfest because our current volunteer is retiring, and you have to have a meeting record according to Robert's Rules. We've 'appointed' one before when the guy didn't show up once, but Paul GXD said you can't do that officially.

#### **New Business**

Bill FLR said **Wx Spotter Training** will be offered at the UNO Williams Alumni Center at 67<sup>th</sup> and Dodge on March 26<sup>th</sup> 7PM. He also had a list of upcoming Hamfests including Lincoln in May.

Paul GXD noted the **RAGBRAI** bike ride starts in Glenwood IA this year. Don W0AF said yes, he has heard about it but could find no one in Glenwood who knew about it.

Paul also said the **Celebrate CB Parade** which we usually help organize is on Saturday 11 May.

Chris FBL says he is an Extra and accredited VE for testing but wonders where to help. Rick RLR said they do testing in Lincoln. Don W0AF, also an accredited VE told him to see Dennis YKN over in Bellevue NE.

By quick motion and second, we adjourned the meeing at 8:26PM.

Minutes by temp Sec'y, Rich WA0ZQG