



**Ham Radio**  
in the 21st Century



Science  
Technology  
Experimentation  
*We Do That!*  
...with Amateur  
Radio





W4RSC "RADIO SILVER COMET"

ARRL SPECIAL SERVICE CLUB

# SILVERCOMET SKYWAVE

*Silver Comet ARS, INC NEWS*

PO BOX 1873 Hiram Ga. 30141 501 (C) (3) Not for Profit

Aug 2021 Vol 8 Number 8

***The Aug 3rd Club Meeting  
Will Be Held In Person***

**7pm at the Paulding County Chamber of Commerce  
Lower Level, Back Parking Lot  
455 Jimmy Campbell Pkwy (Hwy 278), Dallas**



## In This Issue

- The Usual Stuff
- Mark Your Calendar
- VE's Do It Again
- FT8 Digital Mode Club
- Common RF Connectors
- Resistor Review
- Just For Fun
- What Is EchoLink
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- Certificate Hunting
- wfview For Icom Radios
- SCARS Breakfast
- Special Events & contests
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- Club Calendar

**If you aren't comfortable being in the room, please join us on Zoom at <https://zoom.us/j/97552899499?pwd=Y0NiWjhrVG45dEpPUlppK0xicWlFdz09>.**

## ***W4RSC "Radio Silver Comet"***

***The Silver Comet ARS Inc. a 501 (c) (3) Not for Profit Organization***



## **Editor's Notes:**



**Newsletter Editor Wanted!** Copies of past SKYWAVE newsletters can be found at the club website <http://www.silvercometars.com/newsletter.php>. Please submit your articles prior to the 25<sup>th</sup> of the month to [K4CGA.GA@gmail.com](mailto:K4CGA.GA@gmail.com)

**Chuck DuVall, K4CGA – Editor**

## **Monday – “SCARS Night Out” Net!**



Please join us on the 146.955 (- 77Hz) repeater at 7:00pm and on Zoom. Check the SCARS Groups.IO calendar for meeting and Zoom link information.

It's fun and informative. Suggestions for Topics of Discussion are always solicited. You don't have to dress up and you can bring your dinner because it's very informal and Troy K4JDA does a great job as the moderator.

## **SCARS Media:**

**Web:** <http://www.silvercometars.com/index.php>

**Groups.IO:** <https://silvercometars.groups.io/g/main>

**Facebook:** <https://en-gb.facebook.com/groups/2360561620926754/>

**QRZ:** <https://www.qrz.com/db/W4RSC/>

**Info:** [Info@silvercometars.com](mailto:Info@silvercometars.com) or [Silvercometars@gmail.com](mailto:Silvercometars@gmail.com)

Send SCARS website corrections, comments, or suggestions to Troy (K4JDA) at [troy.davis@hotmail.com](mailto:troy.davis@hotmail.com)

## **SCARS Community Food Drive!**

**Helping Hands**, our local community Food Bank in Dallas, needs your help! Please bring any non-perishable items to our next meeting. We will deliver it to them the following day.



Your donations will be greatly appreciated by the recipients and you will feel better. PLEASE HELP ! It all adds up.

## *Mark your Calendar!*

Aug. 3<sup>rd</sup> – SCARS Club Meeting  
Aug. 14<sup>th</sup> – GA ARES Convention – Forsyth GA  
Aug. 21<sup>st</sup> & 22<sup>nd</sup> - Huntsville Hamfest  
Sep. 3<sup>rd</sup> thru 5<sup>th</sup> – Shelby NC Hamfest  
Sep. 6<sup>th</sup> - Labor Day  
Sep. 9<sup>th</sup> – Prater’s Mill Swapfest – Dalton GA  
Sep. 24<sup>th</sup> & 25<sup>th</sup> - W4DXCC Conference  
Sep. ??? - Club Fall Family Picnic (maybe)  
Oct. 01 - 30 – SCARS AM Band DX Contest (maybe)  
Nov. 6<sup>th</sup> & 7<sup>th</sup> – Stone Mountain Hamfest



## *SCARS Volunteer Examiners (VE's) Do It Again!.*

“Although I do praise the VE’s that helped me with the FCC testing quite a bit, but this last month, Stan Whitfield (K4SHW); James Akey (KM4IKO); and Cheri Reynolds (K4TXA) all, really did **“STEPPED UP TO THE PLATE”**. We had a fellow ham that does the FCC testing for another Club that after he had had a stroke, was unable to do the VE testing. A few telephone calls later and these three VE’s answer that call for help and tested 5 Candidates. This is what we hams do... help each other.”

On June 28<sup>th</sup> our Testing VE’s tested Mr. Harland S. Moody KO4RSB, email [smoody@pitoenixair.com](mailto:smoody@pitoenixair.com). This gentleman did state an interest in joining our Club.

On July 13<sup>th</sup> our Testing VE’s tested the two following Candidates:

Scott P. Bailey (KO4EAC) passed his General Class. He currently is a Member of the Silver Comet ARS.

Larry S. Williamson [lwilliamson44@att.net](mailto:lwilliamson44@att.net) passed his Technician Class test. This gentleman also voiced an interest in joining our Club.

I would like to have a public **THANK YOU** made to the VE’s of SCARS... namely Stan Whitfield (K4SHW); James Akey (KM4IKO); and Cheri Reynolds (K4TXA). Without these WONDERFUL volunteers, none of this would be possible.

John Reynolds – W4TXA















# **FT8 Digital Mode Club**



Like working FT8? It seems like many of us hams do. It is a quick and easy way to Work All States (WAS), Work All Zones (WAZ), Work All Continents (WAC) and build up your contacts log. Many contests have now approved FT8 as a digital mode for points scoring.

If you are into working FT8 and enjoy certificate collecting, you may want to consider joining the FT8 Digital Modes Club and put those thousands of FT8 contacts to use. They have many nice awards and certificates available to wallpaper your shack with. Give them a look! <https://ft8dmc.eu/anniversary/>

## **Common RF Connectors for Ham Radio!**

Type	Standard		Reverse Polarity	
	male	female	RP male	RP female
<b>SMA</b>	 Threads inside Pin in the middle Diameter: about 6mm	 Threads outside Hole in the middle Diameter: about 5mm	 Threads inside Hole in the middle Diameter: about 6mm	 Threads outside Pin in the middle Diameter: about 5mm
<b>TNC</b>	 Threads inside Pin in the middle Diameter: about 12mm	 Threads outside Hole in the middle Diameter: about 10mm	 Threads inside Hole in the middle Diameter: about 12mm	 Threads outside Pin in the middle Diameter: about 10mm
<b>N</b>	 Threads inside Pin in the middle Diameter: about 17mm	 Threads outside Hole in the middle Diameter: about 14mm	X	X
<b>UHF</b>	 PL-259 Threads inside Pin in the middle Diameter: about 17mm	 SO-239 Threads outside Hole in the middle Diameter: about 14mm	X	X

For more information on these and other connector terms, visit:

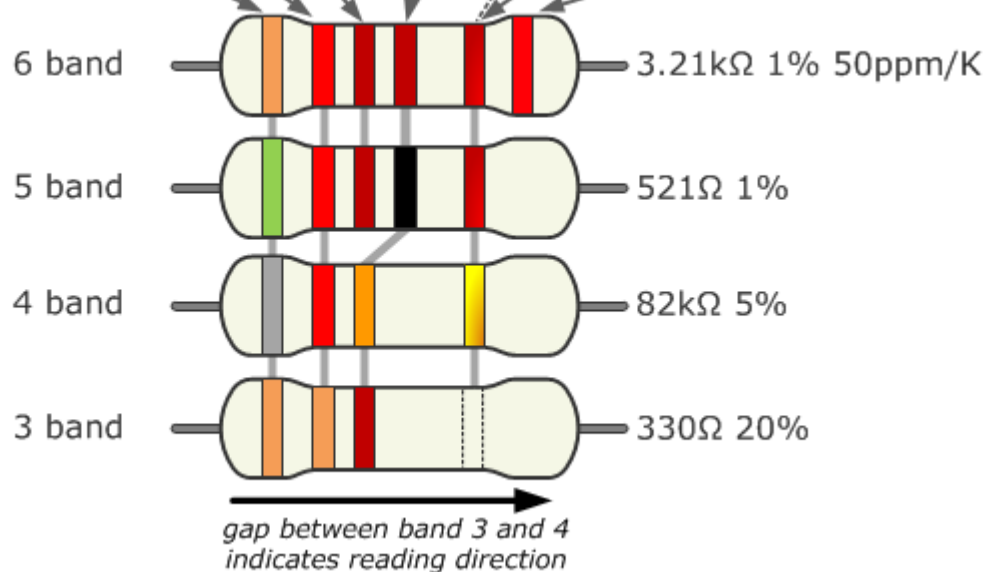
RF Connectors and what they're for: AD#35

<https://www.youtube.com/watch?v=ol36eqfEtlw>

# **Resistor Review – For Newbies And Oldies Alike**

www.resistorguide.com

	Color	Significant figures			Multiply	Tolerance (%)	Temp. Coeff. (ppm/K)	Fail Rate (%)
Bad	black	0	0	0	x 1		250 (U)	
Beer	brown	1	1	1	x 10	1 (F)	100 (S)	1
Rots	red	2	2	2	x 100	2 (G)	50 (R)	0.1
Our	orange	3	3	3	x 1K		15 (P)	0.01
Young	yellow	4	4	4	x 10K		25 (Q)	0.001
Guts	green	5	5	5	x 100K	0.5 (D)	20 (Z)	
But	blue	6	6	6	x 1M	0.25 (C)	10 (Z)	
Vodka	violet	7	7	7	x 10M	0.1 (B)	5 (M)	
Goes	grey	8	8	8	x 100M	0.05 (A)	1(K)	
Well	white	9	9	9	x 1G			
Get	gold			3th digit only for 5 and 6 bands	x 0.1	5 (J)		
Some	silver				x 0.01	10 (K)		
Now!	none					20 (M)		



**Well, here are a few classic phrases collected by Steve K4ELI to help you remember the color code without looking at the above chart.**

- Black Beetles Running On Your Grass Bring Victory Garden Weeds with Green Stamps....
- Because Boys Run Over Your Garden, Be Violent, Get Western Shot Guns  
(The last two stand for Silver and Gold, the 10% and 5% tolerance bands)
- Betty Brown runs over your garden but Violet Gray walks
- Black Beetles Running On Your Grass Bring Very Good Weather
- B. B. ROY Goes to Bombay Via Gate Way
- Better Build Roof Over Your Garage Before Van Gets Wet
- Better Buy Resistors Or Your Grid (or Gate today) Bias Voltages Go West
- Better Be Right Or Your Great Big Venture Goes West.

## **Resistor Review** *(continued)*

- Big Bird Runs On Your Garden But Vegetables Grow Wonderfully
- By Becoming Revolutionary Orators, Young Girls Become Very Great Women
- Bad Beer Rots Our Young Guts But Vodka Goes Well
- Bad Booze Rots Our Young Guts But Very Good Whiskey Goes Smooth

Optionally, you can add the tolerance bands (Gold, Silver, None):  
(for) Gold (or) Silver (or) Nothing with Green Stamps

Not great, but P.C. at least, is this semi-memorable phrase via the U. of Minn. Society for Women Engineers:

- By Becoming Revolutionary Orators, Young Girls Become Very Great Women
- Bad Booze Rots Our Young Guts But Very Good Whiskey Goes Smooth

*Contributed by Steve – K4ELI*

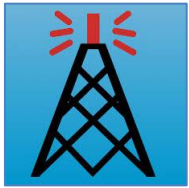
## **K4TXA Receives Award for 2021 Field Day**

Did you attend the SCARS 2021 Field Day Event? If you did, you probably noticed that Cheri K4TXA arranged for our attendees to be well fed. They say the Army runs on its stomach, well so do our Field Day events. Thank you Cheri for a “Job well done”!



Cheri (K4TXA) receiving certificate from Steve (K4ELI)

# **What is EchoLink?**



Why have or use EchoLink? Car hit your power pole? Tree limb fall on you antenna? Maybe you are out of town and Just want to check into the local net or talk to someone in your home town.

Wa-La! With your cell phone and through the magic of the internet, you can do that!

**EchoLink** is a computer-based Amateur Radio system distributed free of charge that allows radio amateurs to communicate with other amateur radio operators using Voice over IP (VoIP) technology on the Internet for at least part of the path between them. It was designed by Jonathan Taylor, call sign K1RFD and has become a very popular mode of communications.

The system allows reliable worldwide connections to be made between radio amateurs, greatly enhancing Amateur Radio's communications capabilities. In essence it is the same as other VoIP applications (such as Skype), but with the unique addition of the ability to link to an amateur radio station's transceiver.

Thus any low-power handheld amateur radio transceiver which can contact a local EchoLink node (a node is an active EchoLink station with a transceiver attached) can then use the Internet connection of that station to send its transmission via VoIP to any other active EchoLink node, worldwide. No special hardware or software is required to relay a transmission via an EchoLink node.

Before using the system, it is necessary for a prospective user's call sign to be validated. The EchoLink system requires that each new user provide positive proof of license and identity before his or her call sign is added to the list of validated users. There is no cost for this service, and it ensures that this system is used only by licensed amateur radio operators.

**EchoLink FAQs** [www.echolink.org/faq.htm](http://www.echolink.org/faq.htm)

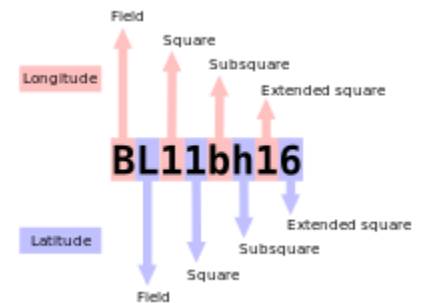
**Take a Tour** [www.echolink.org/tour.htm](http://www.echolink.org/tour.htm)

**User's Guide - Introducing EchoLink** [www.echolink.org/downloads/EchoLinkUsersGuide.pdf](http://www.echolink.org/downloads/EchoLinkUsersGuide.pdf)

# **Grid Squares - What are they?**

The **Maidenhead Locator System** is a method of using grid squares to precisely communicate your position from anywhere on earth.

A Grid Square measures 1° latitude by 2° longitude which is equivalent to approximately 70 × 100 miles. A Grid Square is indicated by two letters and two numbers, as in **EM73**.



Each Grid Square contains a sub-square which is defined by adding two letters after the grid square, EM73**ox**. Sub-squares measure 2.5 minutes latitude by 5 minutes longitude, roughly corresponding to 3 × 4 miles.

Grid Square Mapper - <http://wg7j.reinalda.net/gridmapper/gridmapper.php>

## **Interesting Links**

**ARRL Clubs - SILVER COMET AMATEUR RADIO SOCIETY, INC.**

<http://www.arrl.org/Groups/view/silver-comet-amateur-radio-society-inc>

**Silver Comet ARS YouTube Channel**

[https://www.youtube.com/channel/UCaL7UG0gkRJxV7lnTj\\_P3IQ/videos](https://www.youtube.com/channel/UCaL7UG0gkRJxV7lnTj_P3IQ/videos)

**Silver Comet ARS Website**

<http://www.silvercometars.com/index.php>

**Silver Comet ARS – ARRL Clubs**

<http://www.arrl.org/Groups/view/silver-comet-amateur-radio-society-inc/type:club>

**Silvercometars@groups.io|HOME**

<https://groups.io/g/silvercometars>

**Decoding Digital RF transmissions from across the spectrum**

<http://www.kd0cq.com/2013/07/sorcerer-decoder-download/>



# Certificate Hunting For New Hams!

Have you priced paint and wallpaper recently? Thank you Covid-19! Is your shack looking a little bare?

Well, do some certificate hunting. There are some beautiful certificates out there for just about everything related to ham radio and then some. They make great conversation starters and show how much fun you are having with ham radio. Here are some ideas of what to look for:

- ❖ Work the 3 INDY 500 Motor Speedway special event stations
- ❖ Work 15 warships on CW
- ❖ Work the Original 13 Colonies
- ❖ Work All 50 States
- ❖ Join a Special Operating Mode group (FT8, CW, Olivia, Satellite)
- ❖ Participate in a Rookie Roundup

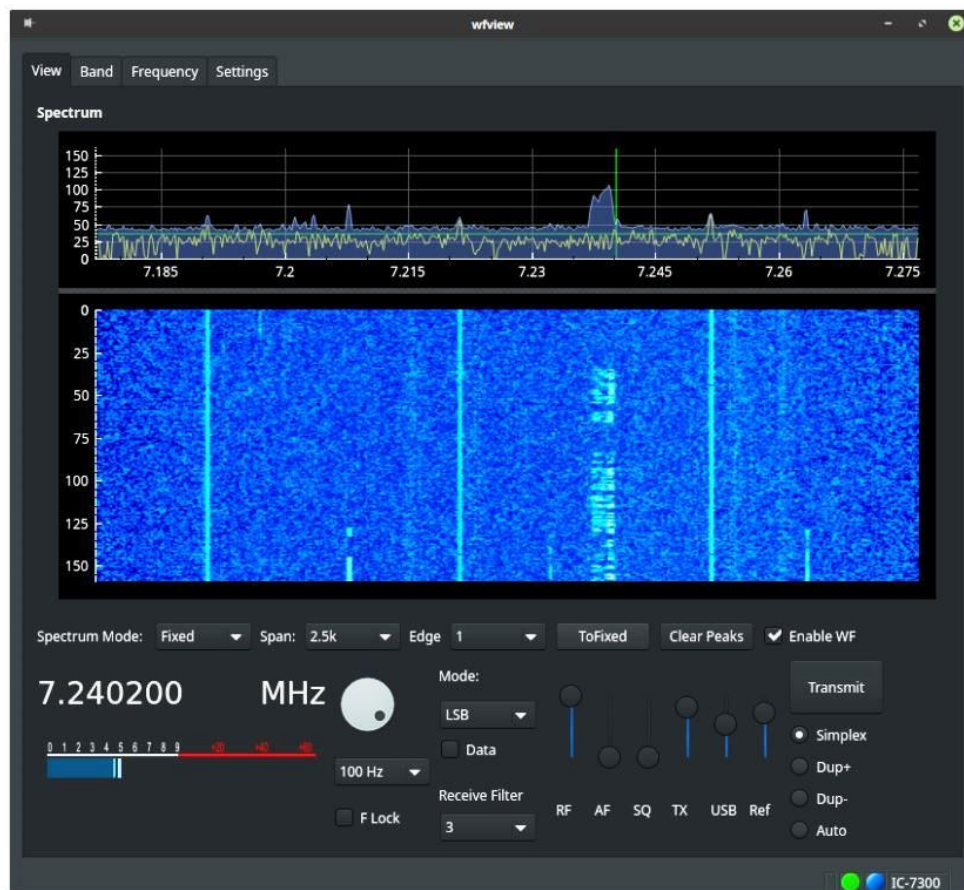
Join in the fun! When you run out of room on your walls, start a notebook.



# ***wfview Open Source Interface For Icom Radios***

**wfview** is a program that allows many modern Icom ham radio transceivers (such as the IC-7300, IC-9700, IC-7610, IC-R8600, the IC-705, and many others) to be controlled via a computer.

**wfview** shows the gorgeous spectrum display on whatever display is connected, including projectors, touch screens, and TVs. **wfview** allows for full radio control from a computer keyboard and basic control from a numeric keypad.



**wfview** can run on hardware ranging from the \$35 Raspberry Pi to laptops to desktops. **wfview** is designed for the Linux operating system but could probably run with minimal modifications on other platforms. **wfview** supports rig control over ethernet/wifi as well as over the traditional USB serial CIV bus.

**For more information:** <https://wfview.org/about/>

## **Breakfast @.....**



Come join us for casual conversation, informal Q&A, problem solving and occasional humiliation at the McDonalds in Hiram (in front of WalMart) near the intersection of Hwy 92 & Hwy 278.

It has a variety of food, is reasonably quick, has decent prices, and is convenient to the majority of the club members.

Visitors, spouses and friends are welcomed.

**Come Join Us!**

**Thursday Mornings  
We Gather Around 8:30 +/-  
Until ??????**



## **Upcoming Special Events**

Please look for K4ELI's weekly email notices regarding contest and special events on the SCARS Group.io reflector or visit the ARRL website at:

[http://www.arrl.org/special\\_events/search/page:2/Date.start:2016-09-14/Date.end:2016-12-31/model:Event](http://www.arrl.org/special_events/search/page:2/Date.start:2016-09-14/Date.end:2016-12-31/model:Event)

# Contest & Special Events

## 2021 ARRL Contest Dates

<b>January 2021</b> <b>1</b> <a href="#">Straight Key Night</a> <b>2</b> <a href="#">Kids Day</a> <b>2-3</b> <a href="#">RTTY Roundup</a> <b>16-18</b> <a href="#">January VHF</a>	<b>February 2021</b> <b>8-12</b> <a href="#">School Club Roundup</a> <b>20-21</b> <a href="#">International DX - CW</a>
<b>March 2021</b> <b>6-7</b> <a href="#">International DX- Phone</a>	<b>April 2021</b> <b>18</b> <a href="#">Rookie Roundup - Phone</a>
<b>June 2021</b> <b>12-14</b> <a href="#">June VHF</a> <b>19</b> <a href="#">Kids Day</a> <b>26-27</b> <a href="#">Field Day</a>	<b>July 2021</b> <b>10-11</b> <a href="#">IARU HF World Championship</a>
<b>August 2021</b> <b>7-8</b> <a href="#">222 MHz and Up Distance Contest</a> <b>21-22</b> <a href="#">10 GHz &amp; Up - Round 1</a> <b>22</b> <a href="#">Rookie Roundup - RTTY</a>	<b>September 2021</b> <b>11-13</b> <a href="#">September VHF</a> <b>18-19</b> <a href="#">10 GHz &amp; Up - Round 2</a>
<b>October 2021</b> <b>18-22</b> <a href="#">School Club Roundup</a> <b>23-24</b> <a href="#">EME - 2.3 GHz &amp; Up</a> -	<b>November 2021</b> <b>6-8</b> <a href="#">Nov. Sweepstakes - CW</a> <b>20-22</b> <a href="#">Nov. Sweepstakes - Phone</a> <b>20-21</b> <a href="#">EME - 50 to 1296 MHz</a>
<b>December 2021</b> <b>3-5</b> <a href="#">160 Meter</a> <b>11-12</b> <a href="#">10 Meter</a> <b>19</b> <a href="#">Rookie Roundup-CW</a>	

## Additional Contest Calendars

<http://www.contestcalendar.com//index.html>

[http://www.cq-amateur-radio.com/cq\\_contests/cq\\_annual\\_contest\\_calendar/cq\\_annual\\_contest\\_calendar.html](http://www.cq-amateur-radio.com/cq_contests/cq_annual_contest_calendar/cq_annual_contest_calendar.html)

<http://ncjwecom/>



# **SCARS Amateur Radio Licensing Schedule.**

## **SCARS/BHBC Test Session (aka East)**

K4ELI and the VE Team will be testing at 7pm at Burnt Hickory Baptist Church, 5145 Due West Road, Powder Springs, on the following dates.

**No walk-ins. Register or call ahead.** See sign at Front Desk for Room #.

### **2021 Schedule**

**The Governor's directives in effect at that time will be adhered to.**

Aug 05 \* Sep 02 \* Oct 07 \* Nov 04 \* Dec 02

For more information, contact Steve Walls, K4ELI: [swalls46@att.net](mailto:swalls46@att.net) (404)697-9840

**All classes of license exams will be available.**

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## **SCARS/Paulding CoC Test Session (aka West)**

W4TXA and the VE Team will be testing at 6:30pm at the Paulding County Chamber of Commerce, 455 Jimmy Campbell Pkwy (Hwy 278), Dallas, on the following dates

### **2021 Schedule**

**The Governor's directives in effect at that time will be adhered to.**

Aug 10 \* Sep 14 \* Oct 12 \* Nov 09 \* Dec 14

For more information, contact John Reynolds, W4TXA: [w4txa.john@gmail.com](mailto:w4txa.john@gmail.com)

**All classes of license exams will be available.**

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### **BRING:**

- Original and copy of existing license.
- Copy of FRN # if you have a GMRS license or some other license.
- \$15 cash----exact change
- Photo ID

See the following web sites for more details:

SCARS [http://www.silvercometars.com/about.php#TEST\\_SESSION](http://www.silvercometars.com/about.php#TEST_SESSION)

ARRL <http://www.arrl.org/licensing-education-training>



# Silver Comet Amateur Radio Society

## 2021 Calendar

\*\* Don't forget our club breakfast every Thursday morning around 8:30am \*\*

	January	February	March	April	May	June
Meeting 1st Tuesday Date/Time:	01-05-2021 7pm	02-02-2021 7pm	03-02-2021 7pm	04-06-2021 7pm	05-04-2021 7pm	06-01-2021 7pm
Meeting Location	"On The Air" 146.955- 77Hz & "Zoom"	"On The Air" 146.955- 77Hz & "Zoom"	"On The Air" 146.955- 77Hz & "Zoom"	"On The Air" 146.955- 77Hz & "Zoom"	Paulding Chamber Of Commerce	Paulding Chamber Of Commerce
Meeting Activity	Contest Station (K3UR) Owner DX Engr.	Toroids & Baluns (N4XL)	Which Ant. Is Best (K4ELI)	Weather (K4DMF)	Last Man Standing WB4QDX	Field Day Prep (FD Team)
Additional Activities	TBD	TBD	TBD	GA QSOP	TBD	Field Day
Hamfest & Conventions	TBD Lawrenceville TechFest	TBD Dalton, GA Orlando, FL (HamCation)	TBD Birmingham Ellijay, GA	TBD Mobile, AL Calhoun, GA	TBD Dayton, OH	TBD Atlanta, GA

This calendar is "Subject to change". Submit change request to K4ELI Steve

V2021.05

# Silver Comet Amateur Radio Society

## 2021 Calendar

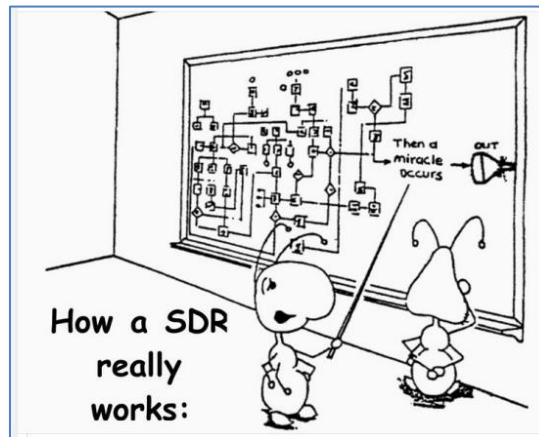
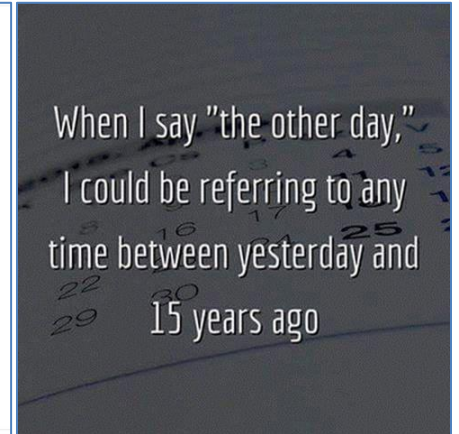
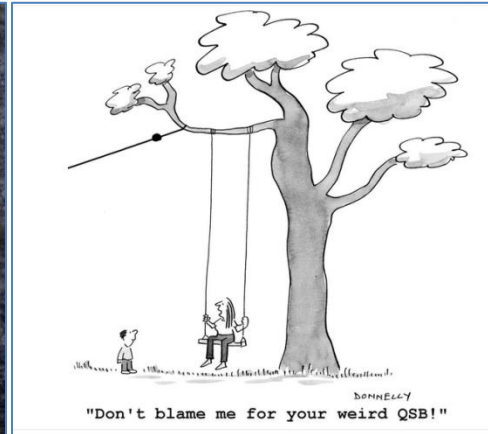
\*\* Don't forget our club breakfast every Thursday morning around 8:30am \*\*

	July	August	September	October	November	December
Meeting 1st Tuesday Date/Time:	07-06-2021 7:30pm	08-03-2021 7pm	09-07-2021 7pm	10-05-2021 7pm	11-02-2021 7pm	12-07-2021 7pm
Meeting Location	Paulding Chamber Of Commerce	Paulding Chamber Of Commerce	Paulding Chamber Of Commerce	Paulding Chamber Of Commerce	Paulding Chamber Of Commerce	Paulding Chamber Of Commerce
Meeting Activity	Baluns or Propagation (K4ELI)	POTA, SOTA, ISS	GRITS Ride / AM DX Contest (K4DMF/K4CGA)	Spark Gap Xmitter (N4GG)	Power Supplies (K4ELI)	SO2R Advanced (SMW)
Additional Activities	TBD	TBD	TBD	TBD	Club Elections	Christmas Party TBD
Hamfest & Conventions	TBD	TBD	TBD	TBD	TBD	TBD

This calendar is "Subject to change". Submit change request to K4ELI Steve

V2021.07

## *Just for Fun!*



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# W4RSC



Paulding County, GA - EM73 - ITU Zone: 8

Silver Comet Amateur Radio Society, Inc.  
PO Box 1873  
Hiram, GA 30141



[www.silvercometars.com](http://www.silvercometars.com)



STATION	Confirming QSO				Pse QSL <input type="checkbox"/> Tnx QSL <input type="checkbox"/>		
	DAY	MONTH	YEAR	UTC	MHz	RST	MODE

## SILVER COMET AMATEUR RADIO SOCIETY, INC.

CONTACT US:

Groups.io Request:

[SilvercometARS@groups.io](mailto:SilvercometARS@groups.io)

Repeater:

146.955 (-) (77hz)

Contact: Club President  
Dan Ozment, W4DTO

Email: [dan@ozment.net](mailto:dan@ozment.net)

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SILVERCOMET ARS, INC.  
PO BOX 1873  
HIRAM, GEORGIA 30141