

The January Club Meeting Will Be Held On the 146.955 Repeater & Zoom!



Please join us on the 146.955 (- 77Hz) repeater at 7pm on January 5th for our monthly club meeting. A Zoom video meeting will be held simultaneously. Check the SCARS Groups.IO calendar for meeting and link information.

The Silver Comet ARS Board of Directors has cancelled physical meeting gatherings at the Chamber building until further notice.

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<u>Prez Sez!</u>



Welcome to 2021! I never thought I would be so glad to leave an old year behind, but it's time for 2020 and its challenges to go away! My hope for all of us this year is for a return to some level of normalcy and civility and for a time to return to face-to-face contact with our friends and loved ones. At the same time I will think of the losses that we have all suffered over the past year.

As the incoming 2021 club president, I want to say THANK YOU to John Reynolds! John has served as club president for the past three years, and he has done a fine job. The club has enjoyed significant growth during his tenure, and under his leadership we have added several new events and have had many great accomplishments. So, thank you, John! Well done!

As your 2021 president I pledge to do everything I can to continue the growth and contribute to the health of this club - the club that has taught me so much and meant so much to me since I began my journey with ham radio a decade ago.

As we begin 2021 I would like for all of us to start thinking ahead to this year and even 2022 and encourage everyone, our newer folks, especially, to consider your role in the club. What would like to see us do as a club? What will you do to help us get there? Think about making your ideas come to reality by chairing or serving on a committee or putting together and leading a work group. Think about taking on a role as a club officer or board member.

Have you done something in amateur radio that you think we would all enjoy hearing about? Write an article for our newsletter or offer to present at a club meeting. If you can't write an article but find an interesting story you would like to share, send it to our newsletter editor. It may show up in next month's Silver Comet Skywave!

Prez Sez! (continued)

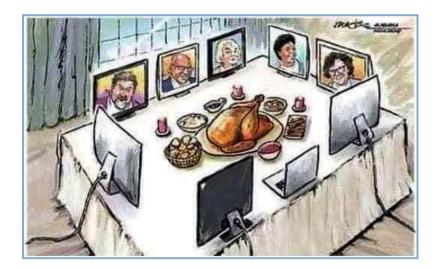
There are always special event stations and contests that you can participate in. Steve sends out а weekly email our club Walls (K4ELI) to email reflector (silvercometars@groups.io) listing the week's special events and contests. If you participate in the contests listen for instructions on how to add your scores to the club's overall score. If you haven't tried contesting give it a try! It is a great way to get good experience as an operator and its fun! Steve's emails and several of our contesting "pros" in the club will help you find a contest that is easy for first timers.

Another avenue where you can contribute to the club is by volunteering for community activities. There are many activities out in the community where amateur radio plays a role. Field day should be coming up in June, and we need your help to pull it off and make it the best ever.

Also, there will be activities outside of the county where you can represent SCARS; events like the Chattahoochee Nature Center's Halloween Hikes, the Peachtree Road Race on July 4, the Publix Atlanta Marathon and Half Marathon. There will also be Amateur Radio Emergency Service (ARES) events both in the county and elsewhere for members of ARES and those who are interested in emergency service. In many of these events you can participate from your home or from remote locations.

The virtual hamshack door is always open. Email me at dan@ozment.net or call me at 404-790-8742 to let me know your thoughts about where you would like 2021 to take the club.

Dan Ozment W4DTO – President, Silver Comet Amateur Radio Society



<u>Editor's Notes:</u>



Copies of past SKYWAVE newsletters can be found at the club website <u>http://www.silvercometars.com/newsletter.php.</u> Please submit your member bios and articles prior to the 25th of the month. I would like to recognize my proof-reader of 55yrs, KA4JMV, my wife Helen, for the fine job she does for peanuts. (free or maybe lunch)

Chuck DuVall, K4CGA – Editor

SCARS Community Food Drive!



COVID-19 has resulted in an unusually high demand for food products from our local Metro food banks.

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

Monday – "SCARS Night Out" Net!



Radio and Zoom check-ins begin at 7:30PM. It's fun and informative. On the 1st Monday of each month, a new technical subject will be introduced for discussion. Suggestions for Topics of Discussion are always solicited. You don't have to dress up because it's very informal and Troy K4JDA does

a great job as the moderator.

Please join us on the 146.955 (- 77Hz) repeater at 7:30pm and on Zoom. Check the SCARS Groups.IO calendar for meeting and Zoom link information.

SCARS Website: <u>http://www.silvercometars.com/index.php</u>

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



<u>\$\$\$ Dues 'R' Due \$\$\$</u>

If you have not done so already, it is time to pay your 2021 dues. And, it is still on \$20. That is still less than a package of TP and a bottle of Hand Sanitizer. What a deal!

Due to the pandemic and the cancellation of our social meetings, please consider using the club Pay-Pal online service to pay your dues. <u>http://www.silvercometars.com/contact.php#Dues</u>



or mail your check to:

Dave Fuller K4DMF Silver Comet ARS 1124 Regiment Drive Acworth, GA 30101

Contact Dave K4DMF if you need additional information: <u>davenesf@comcast.net</u>

(SK) K4ZMW's Widow Presented with Brick



2020 club President John Reynolds (W4TXA) presents Joyce Bowhall, widow of Rick (K4ZMW, SK 2019) a Lucite brick replica of the brick placed in the Diamond Terrace at ARRL Headquarters as a memorial to a Silent Key.

Although Rick was a relatively new amateur, he eagerly

embraced ham radio and left a lasting impression on the Silver Comet ARS members and anyone that was privileged to meet him. Happy trails Rick.



SCARS 2020 Ham Of The Year Award



If you participated in the SCARS 2021 election of officers and board members, you probably found it to be a very fast and simple process.

That is the result of the hard work and preparation done by our club Secretary, James Akey, KM4IKO shown here being presented the *Silver Comet ARS 2020 Ham Of The Year* award

by board member Steve Walls K4ELI.

James spent many hours researching and testing online voting applications, then enlisting some of our club members to help evaluate these programs to insure security and accurate results. Compiling an accurate updated club membership list from data extracted from our treasurer's reports, groups.io list and VE results took days. James then had to verify each and every Email address to insure each valid member had the opportunity to express their vote.

Congratulations James for a well-deserved honor and being re-elected as club Secretary.

<u>Welcome New Amateurs</u>

Covid-19 has changed the way we manage our time and has allowed many prospective applicants time to study and take the license test or grade. Our V.E.'s and members have been busy testing and recruiting new members. Our club membership has been growing.



We all were a newbie at one time or another. If you are a club member

and hear a new call on the repeater, or see a new face on Zoom, be sure and say hello and introduce yourself.

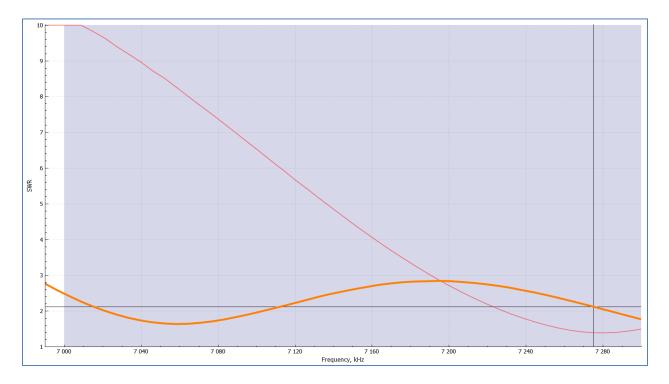
To our new amateurs and new members, our club has a wealth of knowledge and experience in ham radio and we are always willing to answer questions and help out with your radio projects. Welcome aboard and have lots of fun. – <u>Chuck K4CGA Editor</u>

<u> Tuning Dipole Antennas – By K4BBH</u>

One of the more popular Ham antennas is the dipole. Other wire antennas are also used with varying design and configurations. They are inexpensive and afford convenient installation, especially for the lower bands (160 through 30 meters). Once installed, the user is faced with the task of trimming the wire(s) to achieve resonance at the desired operating frequency(s). This usually occurs at the upper parts of the amateur bands for SSB operation. Often times, however, an antenna tuner is employed if the antenna design is somewhat narrow banded.

Most of today's modern transceivers have antenna tuners built in and can accommodate mismatches to achieve acceptable SWR's throughout the SSB section of the band in question. However, if one is interested in operating CW as well as SSB, the internal tuner may not be able to match both sections of the band. In my case, I have a solid state amplifier between the transceiver and antenna. Even though it has its own built in tuner, it will not tune SWR's greater than about 3 to 1. An external tuner between the amplifier and the antenna is required to add the additional LC (Inductance/Capacitance) to achieve resonance. This can be quite a nuisance, however, as retuning maybe required when major frequency changes occur. This is particularly an issue during contesting when going back and forth between SSB to CW is desired.

I decided to play with my RigExpert AA-55 antenna analyzer and by running the analyzer in the continuous mode, I started to play with the 2 variable capacitors and roller inductor in a somewhat random fashion and discovered something quite remarkable. The photo below compares the dipole with no tuner in the circuit (Red) and the empirically generated curve with a manual tuner (Orange). Although 3:1 SWR is not impressive by itself, it DOES allow my amplifier to TUNE from that point on and end up with a 1:1 SWR ACROSS THE ENTIRE BAND.



What Is All That About?

Light bulbs Amateur Radio Past & Now Lee WB4Q0J

Years ago when I got my Novice license (1973), I was really amazed about building antennas. I loved 15 meters and built a lot of verticals. Of course CW was the deal and that's all I was allowed to do. My Johnson Pacemaker transmitter and Hammarlund HQ170A receiver did the trick.

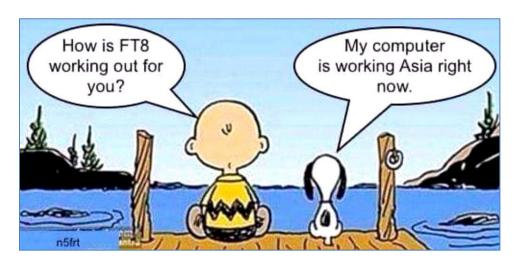
But one day when I was at a mentors home (he was a General class), he was explaining to me about tuning your transmitter. He had always said a 100 watt light bulb worked well. Tune for the brightest glow. This method was used on the old ARC5 transmitters that were on Fighter planes in WW2. The tuning EYE tube was the same idea. He told me that it worked and it did.



But to my amazement, he was tuning his transmitter on voice. "Testing, Testing, and his call sign" and to my amazement, another ham 2 counties away answered him.

WOW! I WAS FREAKING OUT. He was amazed also. This leads me to the next thing; jump to year 2020. We are all aware of FT-8 and very weak signal modes. There are groups that operate thousands of miles using FT-8 on a *Light Bulb*! It works well and even a contest is now available. So take a look at the link below and put some challenge in your FT-8. IT WORKS! <u>https://www.hamsignal.com/blog/lightbulb-qso-party-2020</u>

72 (that 73 in QRP world) WB4Q0J FT8 Digital Modes Club #0008



<u>Missed but not forgotten!</u>

OMG, what has this COVID thing done to us? It surely has changed our personal lifestyle; who we see, where we go, how we dress, what we eat and even our grocery list. It has given us more time to work on antennas and operate our radios. But, how has it affected our club's social activities? Here are some activities that are missed but not forgotten. Maybe next year we can pick up where we left off. *– Chuck K4CGA Editor*

- SCARS Face to Face Monthly Meetings
- SCARS Special Event activities
- SCARS Food Drives for Helping Hands
- SCARS Family Night Dinners
- SCARS Christmas Dinner
- SCARS Field Day Activities
- SCARS Thursday Morning Breakfast gatherings

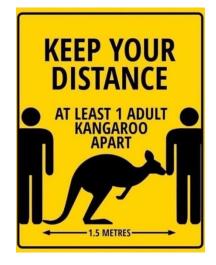
- SCARS Technical Classes by our great Elmer's
- Ham-Fests
- Tech-Fests
- GRITS Bike Ride support
- Chattahoochee Nature Center Support
- Antenna raising parties.
- Impromptu lunches

Interview With NA2AA - the new CEO of the ARRL

Interesting interview – increased attention to digital communication and learning centers. A new push for youth in the hobby along with attention to ARES integration in the learning center. My takeaway message is that the new CEO has been looking toward the future for where the organization needs to go to be relevant and not staying with tradition and looking backward. He recognizes the challenges, but presents them in a reassuring manner which conveys competence and even-handedness. Very positive and optimistic "in-charge" leader without being an autocrat. At least that is the image I received. - *Dave K4DMF <davenesf@comcast.net>*

View the interview: https://youtu.be/5bKv6InXAkg





DSTAR Registration



Navigate to: <u>https://regist.dstargateway.org</u> Registration Instrusctions: <u>https://regist.dstargateway.org/instructions/</u>

Locate *New User? Registration*. Click **Register**. Fill in the info. Submit. Wait for email confirmation which may take several days.

New user? Registration Instructions

This registration site is provided by volunteers to enable D-STAR enthusiasts who **do not have** a local gateway system to register with; a place to register for access to the D-STAR network. You must have a valid amateur radio license issued in your country of origin to register here.

Register

Need A DMR ID?



Effective Dec 19th, RadioID.net became the World Wide Registrar for DMR / NXDN / CPLUS Digital IDs. To register for a DMR ID go to <u>www.radioed.net</u>. Also available on this website:

Repeater Maps: Fully functional dynamic maps that display all the repeaters in the system with TG information.

Database: Contains DMR IDs and is used for building code plugs

Contact Generator: Easily generate as many personalized contact lists as you like and associate them with all your different radios.

<u> Multi-Protocol Reflector System</u>

Meet the Silver Comet ARS/ Paulding ARES Multi-Protocol Reflector system (XLX043)! This reflector allows those who have DSTAR, DMR, Yaesu Fusion radios, or the Peanut app installed on Windows or Android, to connect to a central reflector and talk between modes!

If you have DSTAR capability you can connect to the reflector using XRF043A or the WX4PCA 2m repeater. If you have DMR, make a group call to talk group 3172582. And, if you use Fusion or Peanut connect to reflector XLX043A.

XįiX043 Multi	Protocol Reflector System
DSTAR	XRF043A DCS043A RF via WX4PCA-C repeater SmartGroup PCARES
DMR Brandmeister	Group Call to 3172582
Yaesu Fusion	YSF-15976 - XLX043A
Peanut	XLX043A

The following chart illustrates the different modes.

The system is still considered to be in its "test" mode for now, but it seems to be working very well.

Thanks to Tommy (K4VTE) and James (KM4IKO) for loaning the equipment that is being used to connect between the different modes.

Contact Dan Ozment (<u>dan@ozment.net</u>) if you have questions.

<u>Build An ILA (Ionic Liquid Antenna)</u>



NOLX test antenna

What is an *Ionic Liquid Antenna*? It is a Salt Water antenna. Yeah. That is right! Salt water can make a good antenna as well as a ground.

An *Ionic Liquid Antenna* is new antenna technology using salt dissolved in water as the radiating element. Stimulating a column of salt water, with a salinity in excess of 70 parts per thousand (ppt), produces an antenna usable at HF frequencies (<30 MHz).

Visit the NOLX web site <u>http://nOlx.com/ila large1.html</u> for more information on building this and other antennas for portable, marine, bicycle and backpack use.

For more information in ILAs: <u>https://hackaday.com/2017/01/09/pumping-up-an-antenna-from-a-stream-of-sea-water/</u> <u>https://ieeexplore.ieee.org/document/1461138</u> <u>https://researchportal.hw.ac.uk/en/publications/ionic-liquid-antenna</u> <u>http://www.hamdomain.com/lm-antenna/</u>

Dispose Medications at Home

Follow-up to article in July 2020 SKYWAVE

Due to the COVID-19 pandemic, collection sites may be limited. If you are unable to find a collection location near you, you can dispose of unused medications at home. Follow these steps to safely dispose of your medications.

Take your prescription drugs out of their containers. Mix pills or liquids with an unpleasant substance, such as dirt, cat litter, or used coffee grounds. Do not crush pills. Put the mixture in a container, such as a sealable plastic bag. Throw the container away in your trash at home.

Scratch out all personal information, including Rx numbers, on the prescription labels of empty medication bottles or packaging, then throw them away or recycle them.

Some medications have specific disposal instructions. Check the <u>FDA's flush list</u> to see if your medicine is on the list.

Guidelines for appropriate disposal of medications can be found at: <u>https://www.fda.gov/consumers/consumer-updates/where-and-how-dispose-unused-</u><u>medicines</u>

Interesting Links To Visit!

Understanding the coming solar cycle 25

https://www.youtube.com/watch?v=IRNJPkQPo_g&feature=youtu.be

Capture the MAGIC of Six Meters — eBook | K5ND https://www.k5nd.net/2020/08/capture-the-magic-of-six-meters-ebook/

Using I-Q signals between SDRUno and MultiPSK.pdf

International DSTAR HF Testing Net WINTER SCHEDULE http://hf.dstar-relay.net/

Turn Your Laptop Into a Triple Screen Workstation <u>https://www.facebook.com/tomsfinds/videos/turn-your-laptop-into-a-triple-screen-</u> workstation/791236868389425/

"The Art and Skill of Radio Telegraphy" by William G. Pierpont, NOHFF, <u>http://cw.hfradio.org/cw_resources/The_Art_and_Skill_of_Radio_Telegraphy-3rd-edition.pdf</u>

International DSTAR HF Testing Net http://hf.dstar-relay.net/

Video Tutorials - Win4IcomSuite for Icom Radios <u>https://icom.va2fsq.com/video-tutorials/</u>

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 <u>https://www.youtube.com/channel/UCaL7UG0gkRJxV7lnTj_P3IQ/videos</u>

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/

<u>Breakfast @.....</u>

Join us on the 146.955 repeater and on "ZOOM" on Thursdays @ 8:30am. In person gatherings are cancelled until further notice due to Covid-19 safety concerns! For "ZOOM" information, check the SCARS Groups.IO calendar.

Bring your own coffee and donuts or biscuits and gravy. No sharing allowed.

Come Join Us!

Thursday Mornings We Gather Around 8:30 +/-Until the last one leaves! Even on the Repeater or ZOOM!



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



Contest & Special Events

2021 ARRL Contest Dates						
January 2021	February 2021					
1 <u>Straight Key Night</u>	8-12 School Club Roundup					
2 <u>Kids Day</u>	20-21 International DX – CW					
2-3 <u>RTTY Roundup</u>						
16-18 January VHF						
March 2021	April 2021					
6-7 International DX– Phone	18 <u>Rookie Roundup – Phone</u>					
June 2021	July 2021					
12-14 <u>June VHF</u>	10-11 IARU HF World Championship					
19 <u>Kids Day</u>						
26-27 <u>Field Day</u>						
August 2021	September 2021					
7-8 222 MHz and Up Distance Contest	11-13 September VHF					
21-22 <u>10 GHz & Up – Round 1</u>	18-19 <u>10 GHz & Up - Round 2</u>					
22 <u>Rookie Roundup – RTTY</u>						
October 2021	November 2021					
18-22 School Club Roundup	6-8 <u>Nov. Sweepstakes – CW</u>					
23-24 <u>EME – 2.3 GHz & Up</u>	20-22 <u>Nov. Sweepstakes – Phone</u>					
-	20-21 EME - 50 to 1296 MHz					
December 2021						
3-5 <u>160 Meter</u>						
11-12 <u>10 Meter</u>						
19 <u>Rookie Roundup-CW</u>	Check your emails					
	for additional					
	contest and special					
	event activities					
	event activities					

Additional Contest Calendars

<u>http://www.contestcalendar.com//index.html</u> <u>http://www.cq-amateur-radio.com/cq_contests/cq_annual_contest_calendar/cq_annual_contest_calendar.html</u> <u>http://ncjwecom/</u>

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 #. 2020/2021 Schedule The Governor's directives in effect at that time will be adhered to. Jan 07 * Feb 04 * Mar 04 * Apr 01 * May 06 * Jun 03 Jul 01 * Aug 05 * Sep 02 * Oct 07 * Nov 04 * Dec 02 For more information, contact Steve Walls, K4ELI: swalls46@att.net (404)697-9840 All classes of license exams will be available. SCARS/Paulding CoC Test Session (aka West) W4TXA and the VE Team will be testing at 6:30pm on the following dates. Contact John W4TXA w4txa.john@gmail.com for test session location and information. 2020/2021 Schedule The Governor's directives in effect at that time will be adhered to. Jan 12 * Feb 09 * Mar 09 * Apr 13 * May 11 * Jun 08 Jul 13 * Aug 10 * Sep 14 * Oct 12 * Nov 09 * Dec 14 For more information, contact John Reynolds, W4TXA: w4txa.john@gmail.com All classes of license exams will be available. **BRING:** • Original and copy of existing license. Amateur Radio

Copy of FRN # if you have a GMRS license or some other license.

License

Testina

- \$15 cash----exact change
- Photo ID

See the following web sites for more details:

SCARS <u>http://www.silvercometars.com/about.php#TEST_SESSION</u>

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	Мау	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"	"On The Air" 146.955– 77Hz & "Zoom"	"On The Air" 146.955– 77Hz & "Zoom"			
Meeting Activity	Contest Station (K3UR) Owner DX Engr.	Toroids & Baluns (N4XL)	Which Ant. Is Best (K4ELI)	Weather (K4DMF)	SO2R Basics ((K4ELI)	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 V2021.00									

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:	07-07-2021 7:30pm	08-04-2021 7pm	09-01-2021 7pm	10-06-2021 7pm	11-03-2021 7pm	12-01-2021 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"	"On The Air" 146.955– 77Hz & "Zoom"	"On The Air" 146.955– 77Hz & "Zoom"			
Meeting Activity	ТВА	TBA	ТВА	ТВА	ТВА	ТВА			
Additional Activities	TBD	TBD	TBD	TBD	Club Elections	Christmas Party TBD			
Hamfest & Conventions	Cancelled	Cancelled	Cancelled	Cancelled	Cancelled	Cancelled			
This calendar is "Subject to change". Submit change request to K4ELI Steve									
V2021.00									



SILVER COMET AMATEUR RADIO SOCIETY, INC.

CONTACT US:

Groups.io Request: <u>SilvercometARS@groups.io</u>

> Repeater: 146.955 (-) (77hz)

Contact: Club President Dan Ozment, W4DTO

Email: dan@ozment.net

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