

- **Generator Safety**
- **HF DSTAR**
- **Tools Explained**
- **CERT Training** •
- **DV Repeater Growth**
- **Interesting Links**
- **Breakfast Net Info**
- **Special Events & contests**
- **Club VE Schedule**
- **Club** Calendar

Please join us on the 146.955 (- 77Hz) repeater at 7pm for the November 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.





<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.

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:



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

Silver Comet ARS Club Elections



Well, if you didn't vote, it's too late. Thanks to the hard work and research by our club Secretary, James KM4IKO, and his election committee, our voting process during the Pandemic was a success.

SECRETARY

James Akev

км4іко

(Re-elected)

With 59% of our club members voting, here are the results of the Silver Comet ARS 2021 elections:



Dan Ozment W4DTO (Elected)

Chuck DuVa

KACGA

(Re-elected)

2021 Club Officers

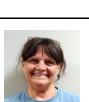


Steve Walls K4ELI (Elected)

2021 Board Of Directors



James Akey KM4IKO



TREASURER

Dave Fuller

K4DMF

(Re-elected)

Cheri Reynolds K4TXA



K4ELI



<u>It's Over!</u>

Ron West

WB3II X

(Elected)

The SCARS 6th Annual AM Broadcast Band DX Contest is over. **How did you do?** Be sure to submit your score and the last page of your log to <u>K4CGA.ga@gmail.com</u>. Place Remember, this is an honor system.

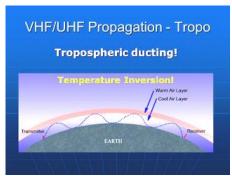
The winner will be announced in the December newsletter. Good Luck!

Inversion. You've Heard About It. What Is It?

No, it is not hanging upside down by your toes like a possum. *Inversion,* as it is known in the ham radio world, is *Tropospheric ducting*, a type of radio propagation that tends to occur during periods of stable, anti-cyclonic weather. An inversion happens when the signal encounters a rise in temperature in the atmosphere instead of the normal decrease, commonly referred to as a temperature inversion.

Temperature inversions occur most frequently along coastal areas bordering large bodies of water. This is the result of natural onshore movement of cool, humid air shortly after sunset when the ground air cools more quickly than the upper air layers. In inland areas, the same action may take place in the morning when the rising sun warms the upper layers.

The observable characteristics are usually clear, cloudless days with little or no wind. At sunset the upper air cools, as does the surface temperature, but at different rates. This produces a boundary or temperature gradient, which allows an inversion level to form. A similar effect occurs at sunrise. The inversion is capable of allowing very high frequency (VHF) and UHF signal propagation well beyond the normal radio horizon distance.



Tropospheric ducting of radio and television signals is relatively common during the summer and autumn months, and is the result of change in the refractive index of the atmosphere at the boundary between air masses of different temperatures and humidity's.

Tropospheric ducting affects all frequencies. Signals affected by this type of ducting tend to travel up to 800 miles or more while with tropospheric-bending, stable signals with good signal strength from 500+ miles (800+ km) away are not uncommon when the refractive index of the atmosphere is fairly high.

Even though tropospheric ducting has been occasionally observed down to 40 MHz, the signal levels are usually very weak. Higher frequencies above 90 MHz are generally more favorably propagated.

Extracted from Wikipedia - Editor

<u>It's Almost That Time Again!</u>

We are fast approaching the new year and you may want to consider paying your 2021 dues.

Due to the pandemic and our social meetings being cancelled, please consider using the club Pay-Pal online service at http://www.silvercometars.com /contact.php#Dues or mail your check to:

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



For Credit Card payment, contact Dave K4DMF for instructions: <u>davenesf@comcast.net</u>

Friends & Neighbors Check!



Temperatures are dropping. The Pandemic is here. Cold and Flu season is rapidly approaching and you probably voted. Kind of makes you sick, doesn't it?

Well, your neighbors, friends and fellow hams might feel the same way. If you haven't heard from them in a while, you might want to

give them a buzz and check up on them. Make sure they are feeling well, have heat, food, medicines and power.

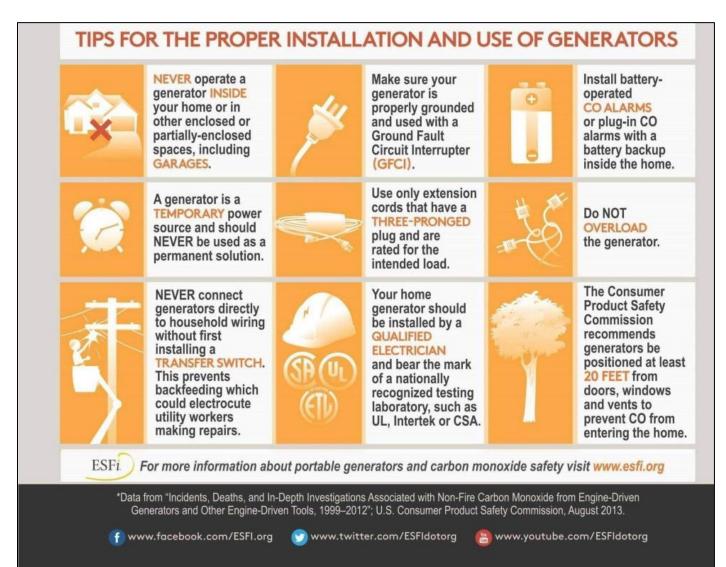
If they are in need of something, let someone know. Amateur radio operators just don't operate radios; they are a caring, resourceful and generous group of folks willing to help anyone, anywhere and at any time.



Portable Generator Safety!

Greystone Power information: posted via FB 11/01/2020 Thanks to Lee WB4Q0J

As the temperature drops this evening, please follow safety protocols while making plans for your family. Many homes are currently operating with generators, while some are preparing to do so for the first time. It is important to follow the proper installation guidelines for the safety of both your family and the linemen working to repair the lines. NEVER connect the generator directly to your household wiring without having an electrician first install a transfer switch. This will prevent the back-feeding of electricity, which could electrocute a lineman working to make repairs for you and others.



DSTAR Over HF



Many of our club members have purchased the ICOM-7100 Multi-Band & Multi-Mode transceiver which is an excellent choice. The IC-7100 capabilities include DSTAR digital voice which is commonly used on the VHF/UHF bands. DSTAR is also available on the new ICOM IC-9100 & IC-705 transceivers.

The IC-7100, IC9100 & IC-705 are also capable of Digital HF operation using it's DSTAR function. DSTAR HF VOICE is Simplex. NO Internet, NO Repeater, NO Reflector.

Kent KQ4KK, <u>KQ4KK@ARRL.NET</u>, has provided some information on testing your HF DSTAR capabilities using the **International DSTAR HF VOICE Testing Net**.

"We are on each band only for 5 min. or so as to spend less time, if the band is dead we move on earlier. You can go back to a good frequency after the net. MONITOR REF030C to coordinate. We may need to move early or if the frequency is busy. We do not want to step on any AM or SSB activity.

We also use a web page to keep track of who and where we are at <u>http://hf.dstar-</u> <u>relay.net/.</u> You also can check-in to this web site anytime 24/7 to find a DSTAR HF Ham to talk to.

We have a **PRENET** for 30 min. before the start of the scheduled time. This PRENET is for 'FREE FORM" contacts. One should check the web site <u>http://hf.dstar-relay.net/</u> sign in and find a working frequency to work on. When the net starts at the scheduled time, please join the net and follow the frequencies."



DSTAR Over HF (continued)

DSTAR HF VOICE SCHEDULE

Sat PM 7:00 E (2400Z) Sunday AM 10:00 E (1500Z Sunday)(Spend more time on each open band, and start on 80m) Sunday PM 7:00 E (2400Z)

Check USB/LSB on frequency to make sure the frequency is clear.

SUNDAY AM, we start with 80m and work towards 6 meters.

6 mtrs 50.210 DV for 2 mins 10 mtrs 28.570 DV for 5 mins 12 mtrs 24.938 DV for 5 mins 15 mtrs 21.380 DV for 5 mins 17 mtrs 18.148 DV for 5 mins 20 mtrs 14.340 DV for 5 mins 40 mtrs 7.285(or another open freq) DV for 5 mins 75 mtrs 3.880 DV for 5 mins.

NCS will check the frequency ahead of time to make sure we don't step on anyone 3KC up and DOWN.

Digital voice is defined in the Commission's rules based on content as voice (i.e. phone), not data, per Section 97.3(c)(5) of the Rules." Check out the most recent comments by the ARRL: <u>http://apps.fcc.gov/ecfs/document/view?id=7521063715</u>

Here is a video from K6UDA DSTAR HF Voice simplex on a 705 https://www.youtube.com/watch?v=45MaJiIXQXo&t=3s

Please join *HFDstar@groups.io* Join Groups.io at *https://groups.io/register*



Tools Explained

DRILL PRESS: A tall upright machine useful for suddenly snatching flat metal bar stock out of your hands so that it smacks you in the chest and flings your beer across the room, denting the freshly-painted project which you had carefully set in the corner where nothing could get to it.

<u>WIRE WHEEL:</u> Cleans paint off bolts and then throws them somewhere under the workbench with the speed of light. Also removes fingerprints and hard-earned calluses from fingers in about the time it takes you to say, 'Oh sh*t'

DROP SAW: A portable cutting tool used to make studs too short.

PLIERS: Used to round off bolt heads. Sometimes used in the creation of blood-blisters.

BELT SANDER: An electric sanding tool commonly used to convert minor touch-up jobs into major refinishing jobs.

<u>HACKSAW</u>: One of a family of cutting tools built on the Ouija board principle... It transforms human energy into a crooked, unpredictable motion, and the more you attempt to influence its course, the more dismal your future becomes.

<u>VISE-GRIPS</u>: Generally used after pliers to completely round off bolt heads. If nothing else is available, they can also be used to transfer intense welding heat to the palm of your hand.

<u>OXYACETYLENE TORCH</u>: Used almost entirely for lighting on fire various flammable objects in your shop. Also handy for igniting the grease inside the wheel hub out of which you want to remove a bearing race..

TABLE SAW: A large stationary power tool commonly used to launch wood projectiles for testing wall integrity.

<u>HYDRAULIC FLOOR JACK</u>: Used for lowering an automobile to the ground after you have installed your new brake shoes, trapping the jack handle firmly under the bumper.

<u>BAND SAW</u>: A large stationary power saw primarily used by most shops to cut good aluminum sheet into smaller pieces that more easily fit into the trash can after you cut on the inside of the line instead of the outside edge.

<u>TWO-TON ENGINE HOIST</u>: A tool for testing the maximum tensile strength of everything you forgot to disconnect.

PHILLIPS SCREWDRIVER: Normally used to stab the vacuum seals under lids or for opening old-style paper-and-tin oil cans and splashing oil on your shirt; but can also be used, as the name implies, to strip out Phillips screw heads.

STRAIGHT SCREWDRIVER: A tool for opening paint cans. Sometimes used to convert common slotted screws into non-removable screws and butchering your palms.

PRY BAR: A tool used to crumple the metal surrounding that clip or bracket you needed to remove in order to replace a 50 cent part.

HOSE CUTTER: A tool used to make hoses too short.

HAMMER: Originally employed as a weapon of war, the hammer nowadays is used as a kind of divining rod to locate the most expensive parts adjacent the object we are trying to hit.

<u>UTILITY KNIFE</u>: Used to open and slice through the contents of cardboard cartons delivered to your front door; works particularly well on contents such as seats, vinyl records, liquids in plastic bottles, collector magazines, refund checks, and rubber or plastic parts. Especially useful for slicing work clothes, but only while in use.

ADJUSTABLE WRENCH: aka "Another hammer", aka "the Swedish Nut Lathe", aka "Crescent Wrench". Commonly used as a one size fits all wrench, usually results in rounding off nut heads before the use of pliers. Will randomly adjust size between bolts, resulting in busted buckles, curse words, and multiple threats to any inanimate objects within the immediate vicinity.

<u>Son of a b*tch TOOL</u>: Any handy tool that you grab and throw across the garage while yelling 'Son of a b*tch' at the top of your lungs. It is also, most often, the next tool that you will need.

CERT Training: Basic Life Support CPR

Here is an opportunity to take a CPR class. Reply to Eve if interested in joining one of these and please copy me so I know you plan to attend. – Dave K4DMF

The training dates to choose from are:

Tuesday, December 8th from 6:00PM-10:00PM Thursday, December 17th from 6:00PM-10:00PM Thursday, January 7th from 6:00PM-10:00PM

Please remember our training registration process and respond to me with which date you would like to attend, include your 1st and 2nd choice in case one of the dates that you are interested in is already full. Once I receive your response, I'll add you to the list and send you an email confirmation. Once I receive your response, please let me know of any changes. Don't hesitate to let me know if you have any questions.

Eve Cogsdell, GA-CEM

EMA Coordinator Emergency Operations Center Asst. Director Paulding County EMA 1389 Industrial Blvd. North Dallas, Georgia 30132 O: 678-383-3420 | C: 678-576-0417 Email: <u>ecogsdell@paulding.gov</u>

Dave Fuller, K4DMF

1124 Regiment Drive Acworth, GA 30101 770-421-9902 home 404-697-3153 cell davenesf@comcast.net

Growth Of Digital Voice Repeaters



Interesting Links to visit!

Co-channel cancelling tool for SDR

https://swling.com/blog/2020/10/ivan-demonstrates-the-incredible-sdr-co-channel-canceller/

fldigi 4.1.15.05 alpha

http://www.w1hkj.com/alpha/fldigi

Frequency Management Test; How To <u>FLdigi and FMT Mode by VE3YX.pdf</u>

Raspberry-pi for Ham Radio <u>https://dl1gkk.com/setup-raspberry-pi-for-ham-radio/</u>

DMR Dashboard on QuadNet

https://dmr.openquad.net/

Decoding DRM on Shortwave with SDR

https://youtu.be/lextsInwtUQ

New release of Win4IcomSuite is available

https://www.youtube.com/results?search_query=win4icomsuite

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

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/

New way to surf the internet – Browser guide https://www.browserguides.net/brave-or-chrome/?

<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.

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

2020 ARRL Contest Dates					
January 20201Straight Key Night4Kids Day4-5RTTY Roundup18-20January VHF	February 2020 10-14 <u>School Club Roundup</u> 15-16 <u>International DX – CW</u>				
March 2020 7-8 <u>International DX– Phone</u>	April 2020 19 <u>Rookie Roundup – Phone</u>				
June 2020 13-15 June VHF 20 <u>Kids Day</u> 27-28 <u>Field Day</u>	July 2020 11-12 IARU HF World Championship				
August 20201-2222 MHz and Up Distance Contest15-1610 GHz & Up - Round 116Rookie Roundup - RTTY	September 2020 12-14 September VHF. 19-20 10 GHz & Up - Round 2 12-13 EME - 2.3 GHz & Up				
October 2020 19-23 School Club Roundup 10-11 EME - 50 to 1296 MHz -	November 2020 7-9 Nov. Sweepstakes – CW 21-23 Nov. Sweepstakes – Phone 28-29 EME - 50 to 1296 MHz				
December 2020 4-6 <u>160 Meter</u> 12-13 <u>10 Meter</u> 20 <u>Rookie Roundup-CW</u>	Check your emails for additional contest and special 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> http://ncjwecom/

SCARS V.E. ACTIVITIES

ARRL

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: 2020 Schedule VE Testing at BHBC is back on schedule for the August-December test sessions. The Governor's directives in effect at that time will be adhered to. Nov 5 Dec 3 Please check the ARRL website for changes or corrections. For more information, contact Steve Walls, K4ELI: swalls46@att.net 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 at the Paulding County Chamber of Commerce, 455 Jimmy Campbell Pkwy (Hwy 278), Dallas, on the following dates: 2020 Schedule Due to Covid-19 concerns and restrictions, contact John W4TXA w4txa.john@gmail.com for test session schedule information. Nov 10 Dec 08 Please check the ARRL website for changes or corrections. For more information, contact John Reynolds, W4TXA: w4txa.john@gmail.com All classes of license exams will be available. **BRING:** Amateur Radio • Original and copy of existing license. License Copy of FRN # if you have a GMRS license or some other license. Testing \$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.arrl.org/licensing-education-training

Silver Comet Amateur Radio Society							
2020 Calendar							
** Don't forget our club breakfast every Thursday morning around 8:30am **							
	July	August	September	October	November	December	
Meeting 1st Tuesday Date/Time:	07-07-2020 7:30pm	08-04-2020 7pm	09-01-2020 7pm	10-06-2020 7pm	11-03-2020 7pm	12-01-2020 7pm	
Meeting Location	"On The Air" 146.955– 77Hz & "Zoom"	"On The Air" 146.955– 77Hz & "Zoom"	"On The Air" 146.955– 77Hz & "Zoom"				
Meeting Activity	VE Recognition Night	ТВА	ТВА	ТВА	ТВА	ТВА	
Additional Activities	TBD	TBD	Club Fall Picnic (TBD)	AM DX Contest	Club Elections	Christmas Dinner ????	
Hamfest & Conventions	Culiman, AL	Huntsville, AL	SEDEC DX	La Grange, GA Chattanooga, TN Rome, GA	Montgomery, AL.		
This calendar is "Subject to change". Submit change request to K4ELI Steve							
V2020.10							

Stone Mountain Hamfest Inaugural Commemorative Special Event Stations K4A - K4M - K4R - K4C - W4BOC/P (Bonus Station)

Starting EST Friday, November 6th, 2020 00:00 UTC 7pm EST)



Ending EST Sunday, November 8th, 2020 00:00 UTC (7pm EST)

Sponsored by Alford Memorial Radio Club More Information at <u>StonemountainHamfest.com</u> Look for the Station, Band and Schedule on our website 48 hours round the clock!

Certificates and QSL cards planned.



SILVER COMET AMATEUR RADIO SOCIETY, INC.

CONTACT US: Groups.io Request: SilvercometARS <u>www.silvercometars.com</u> 146.955 (-) (77hz)

Contact: Club President John Reynolds, W4TXA

Email: w4txa.john@gmail.com

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