



***Please join us at 7pm on the 1<sup>st</sup> Tuesday of each month in person or on ZOOM.***

Mount Nebo Methodist Church  
3685 Nebo Rd, Dallas, GA 30157

### Did You Know

*radio* comes from the Latin *radius* which means "beam". As late as July 1921 the New York Times was calling it *wireless telephony*, and *wireless* remained widespread until World War II, when military preference for *radio* established it as the word.

### Challenge

If each US state was allowed one frequency to be the official state channel, and no two adjacent states have the same frequency, how many frequencies would you need to cover the US?

### In This Issue

- Monday Night Net
- SCARS Food Drive
- Christmas Dinner 2022
- Technology History
- Education
- Book of the Month
- Technical Reference
- Adaptories
- Interesting Links
- SCARS Media Center
- Club VE Schedule
- Club Calendar

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

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



## **Editor's Notes:**



**Articles Wanted!** Do you have a story about your ham radio life? Doesn't need to be dramatic, but if it affected your ham career, others will enjoy reading your story. Please email the editor your story, he will polish it, and our club will learn about you. Alain Trottier, N9AL, [atrottier@gmail.com](mailto:atrottier@gmail.com) – Editor

Copies of past SKYWAVE newsletters can be found at the club website <http://www.silvercometars.com/newsletter.php>.

## **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 because it's very informal and you can bring your dinner and eat it too.

**Additional Moderators are needed.** If interested in helping out, please contact Troy at [troy.davis@hotmail.com](mailto:troy.davis@hotmail.com)

## **SCARS Community Food Drive!**



Let's keep up the good work in 2023. Monetary donations are easy to make on our website at <http://www.silvercometars.com/about.php>

**Helping Hands of Paulding County** will gratefully appreciate your thoughtfulness. For more information on this great organization: <http://hhpcga.org/community-support/food-pantry-clothing-donations>

# ***SCARS Annual Family Christmas Dinner (2022)***



The 2022 SCARS Family Christmas Dinner was awesome, so nice to see everyone and their loved ones. Th food was good and company even better.



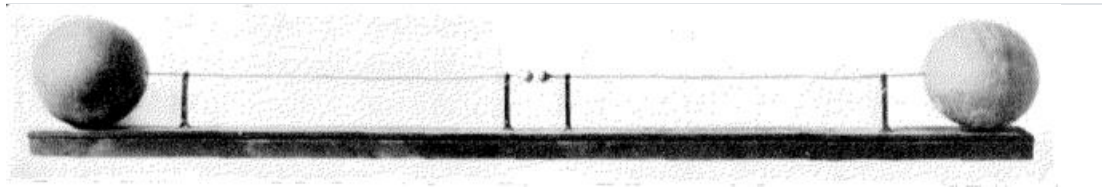


# *Technology History - Distance Communication*

## Quote

*One cannot escape the feeling that these mathematical formulas have an independent existence and an intelligence of their own, that they are wiser than we are, wiser even than their discoverers. - Heinrich Hertz*

## Radio



## Heinrich Hertz

Scottish mathematical physicist James Clerk Maxwell proposed a comprehensive theory of electromagnetism, now called Maxwell's equations. But it was Hertz who proved Maxwell correct. In the autumn of 1886, after Hertz received his professorship at Karlsruhe, he was experimenting with a pair of Riess spirals when he noticed that discharging a Leyden jar into one of these coils produced a spark in the other coil. This is the first generated and observed radio waves. He used a dipole antenna consisting of two one-meter wires with a spark gap between their inner ends, and zinc spheres attached to the outer ends for capacitance, as a radiator. He generated the radio waves by pulses of high voltage of about 30 kilovolts applied between the two sides. He received the waves with a resonant single-loop antenna with a micrometer spark gap between the ends. This was the first 'radio'.

Quote

*I have been frankly fascinated with that unpaid group of people with those ham radios... - Giuliani, Mayor of New York City*

## Marconi

In 1895 Italian inventor Guglielmo Marconi built the equipment and transmitted electrical signals through the air from one end of his house to the other, and then from the house to the garden. These experiments were, in effect, the dawn of practical wireless telegraphy or radio.

Following the successes of his experiments at home, Marconi became obsessed with the idea of sending messages across the Atlantic. He built a transmitter, 100 times more powerful than any previous station, at Poldhu, on the southwest tip of England, and in November 1901 installed a receiving station at St. John's Newfoundland. On December 12, 1901, he received signals from across the ocean. Marconi received many honors, including the Nobel Prize for Physics in 1909.

*Editor: adapted from the National Inventors Hall of Fame*



## Quote

*Because Amateur Radio can bypass the normal Internet, telephone, and postal systems, particularly over the long-distance HF bands, many foreign governments have a legitimate interest in limiting this loss of revenue. - ARRL's Small Antennas for Small Spaces*

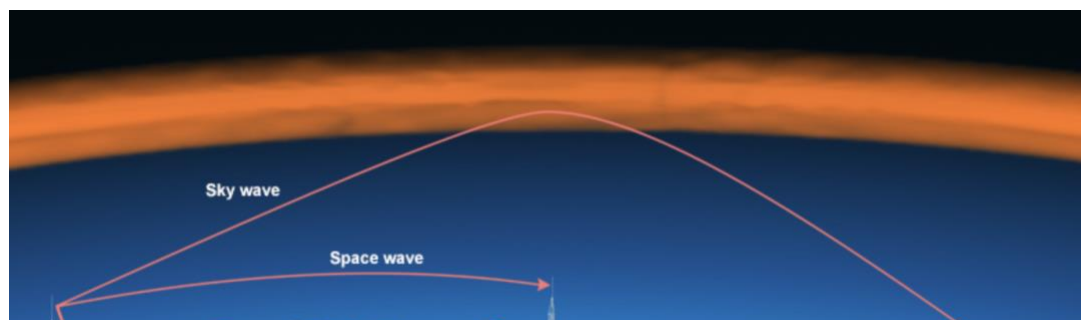
## Atmosphere Bounces Radio Waves

The ionosphere contains a high proportion of free electrons which influence radio propagation. High Frequency (HF) radio waves hitting the free electrons in the ionosphere cause them to vibrate and re-radiate the energy back down at the same frequency, effectively bouncing the radio wave back towards the Earth.

Q: What is the best type of surface or terrain to use for surface wave transmission?

- a) Desert
- b) Fresh water
- c) Jungle
- d) Rocky terrain
- e) Seawater

*The correct answer is e.*



# **Movies**

## Best Ham Radio Movies

---

### *Contact - 1997*

A radio astronomer receives the first extraterrestrial radio signal ever picked up on Earth. As the world powers scramble to decipher the message and decide upon a course of action, she must make some difficult decisions between her beliefs, the truth, and reality.

### *Aningaaq - 2013*

Aningaaq, an Inuit fisherman camping on the ice over a frozen fjord, talks through a two-way radio with a dying astronaut who is stranded in space, 500 kilometers above Earth. Even though he doesn't speak English and she doesn't speak Greenlandic, they manage to have a conversation about dogs, babies, life and death.

### *Men of Boys Town - 1941*

Father Flanagan raises funds, helps a disabled boy, and saves an older boy from reform school.

### *A Family Affair - 1937*

Judge Hardy faces problems at work and at home. Powerful men in town are upset with his decisions and want to see him impeached; his daughters, Joan and Marion, have romantic problems; and his son, Andy discovers Polly Benedict. As usual, Judge Hardy is concerned with everyone in the family and lends wisdom and calmness to all.

### *Everybody's Hobby - 1939*

A hobby-mad family makes their obsessions pay off.

### *The Story of the Queen Mary and W6RO - 2008*

Amateur Radio station W6RO has enjoyed over 29 years of continuous operation aboard the Queen Mary. Nearly 100 radio amateurs volunteer every month to operate from the station. Since radio was reintroduced to the ship, W6RO has presented a positive image of the Amateur Radio Service to more than four million visitors. Permanently docked at the Port of Long Beach, the Queen Mary is one of the most popular tourist attractions in Southern California. W6RO is a regular stop for visitors on the self-guided tour, and visiting radio amateurs may log in and get on the air. The former passenger liner is on the National Register of Historic Places.

*Moving Up to Amateur Radio* - 1974

Short film designed to introduce CB operators during the '70s to the wonders of Amateur Radio

*Ham* - 2022

A group of Montanan hams show the fading but loyal community of amateur radio, explore what it means to be a ham, and how they are trying to keep the hobby alive.

*High Frequency* - 1988

A boy who operates a ham radio and a man who works at a satellite relay station witness the same murder thousands of miles apart and have to figure out how to warn the next potential victim.

*The Ham's Wide World* - 1966

A public service announcement on Amateur Radio, broadcast around the world in the 50s, this film produced by Hollywood producer and Amateur Radio Operator Dave Bell introduces the viewer to the world of the Ham.

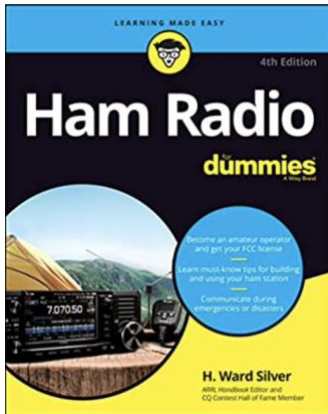
*Editor: list adapted from The Movie Database (themoviedb.org).*



# Book of the Month

---

## Ham Radio For Dummies 4th Edition



by H. Ward Silver

Amateur radio is on the rise, and the airwaves are busier than ever. That's no surprise: being a ham is a lot of fun, providing an independent way to keep in touch with friends, family, and new acquaintances around the world—and even beyond with its ability to connect with the International Space Station! Hams are also good in a crisis, keeping communications alive and crackling during extreme weather events and loss of communications until regular systems like cell phones and the internet are restored. Additionally, it's enjoyable for good, old-fashioned tech geek reasons—fiddling with circuits and bouncing signals off the ionosphere just happens to give a lot of us a buzz!

Longtime ham Ward Silver (Call Sign NØAX)—contributing editor with the American Radio Relay League—patches you in on everything from getting the right equipment and building your station (it doesn't have to be expensive) to the intricacies of Morse code and Ohm's law. In addition, he coaches you on how to prepare for the FCC-mandated licensing exam and tunes you up for ultimate glory in the ham radio hall of fame as a Radiosport competitor! With this book, you'll learn to:

- Set up and organize your station
- Communicate with people around the world
- Prep for and pass the FCC exam
- Tune into the latest tech, such as digital mode operating

Whether you're looking to join a public service club or want the latest tips on the cutting edge of ham technology, this is the perfect reference for newbies and experts alike—and will keep you happily hamming it up for years!

# Best Technical Reference Book

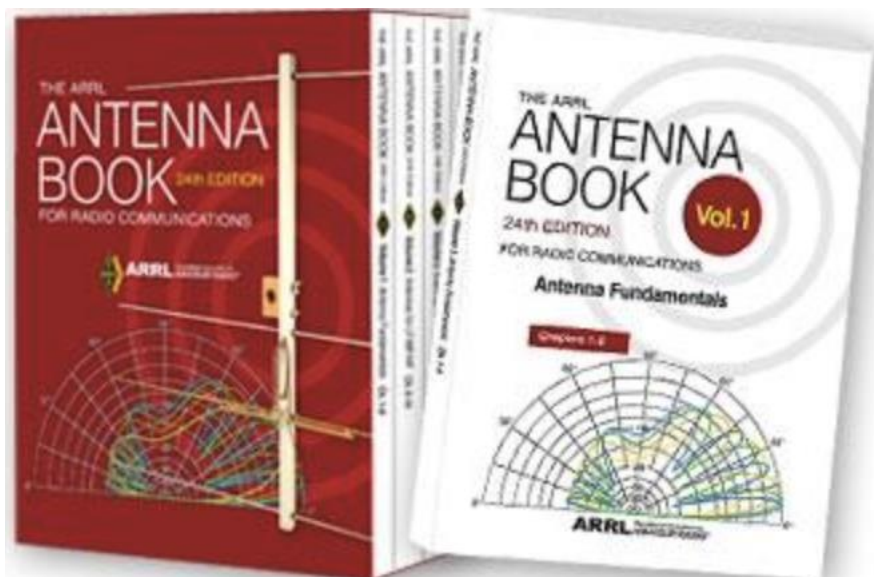
*Hard to understand, hard to remember, extensive theory.*

## *The ARRL Antenna Book for Radio Communications*

*This is a single resource covering antenna theory, design and construction, and practical treatments and projects. This book contains everything you need to understand how radio signals propagate, how antennas work, and how to construct your own antenna system. Use The ARRL Antenna Book to build hundreds of antenna designs: dipoles, verticals, loops, beams, and more.*

### Key Topics:

- New coverage of small transmitting loops
- New and expanded coverage of microwave antennas
- Many new MF, HF, and 6-meter antenna design articles
- Instructions to acquire HFTA terrain profiles online
- An overview of VHF/UHF rover antenna systems
- New chapter on VHF/UHF Antenna systems
- Rotator ratings, installation, and maintenance



# Adaptories

---

*Adaptation + Stories = Classics for Children*

## **One Radio, Two Radios**

One radio, two radios, three radios - four  
Five radios, six radios, seven radios - more  
Eight radios, nine radios, ten radios - all  
One, two, three, four, five, six, seven, eight, nine, ten

One radio, two radios, three radios - four  
Five radios, six radios, seven radios - more  
Eight radios, nine radios, ten radios - all.  
*From "One Potato, Two Potatoes" song*

## **Eeny, Meeny, Miny, Radio**

Eeny, meeny, miny, radio,  
Catch a buddy by the QSO.  
If he cusses, let him go,  
Eeny, meeny, miny, radio.  
*From "Eeny, Meeny, Miny, Mo" e children's rhyme*

## **The Radio and the Antenna**

The Radio and the Antenna were disputing which was the stronger, when a traveler came along driving in a Tesla car. They agreed that the one who first succeeded in making the traveler stop the car and get out should be considered stronger than the other.

Then the Antenna blasted the car with radio waves as hard as he could, but the more he propagated the more closely did the traveler hold the steering wheel. At last the Antenna gave up. Then the Radio blasted the driver with warnings of fire in the engine, and immediately the traveler stopped the car and ran away.

And so the Antenna was agreed that the Radio was the stronger of the two.  
*From "The North Wind and the Sun", one of Aesop's Fables*

## **Interesting Links**

### *ARRL*

ARRL Home: [www.arrl.org](http://www.arrl.org)

ARRL Affiliated Club: [www.arrl.org/clubs](http://www.arrl.org/clubs)

ARRL Section: [www.arrl.org/sections](http://www.arrl.org/sections)

License class in your area: [www.arrl.org/class](http://www.arrl.org/class)

License exam in your area: [www.arrl.org/exam](http://www.arrl.org/exam)

Hamfest or convention: [www.arrl.org/hamfests](http://www.arrl.org/hamfests)

Email ARRL Clubs: [clubs@arrl.org](mailto:clubs@arrl.org)

### *SCARS Media Center*

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)

Webmaster: Troy Davis (K4JDA) at [troy.davis@hotmail.com](mailto:troy.davis@hotmail.com)

Newsletter editor: Alain Trottier (N9AL) at [atrottier@gmail.com](mailto:atrottier@gmail.com)

## **Upcoming Events**

Watch for K4ELI's weekly email notices for 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)

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

Ready to join us for casual conversation, informal Q&A, problem solving? We meet at Martin's Restaurant, 3918 Charles Hardy Parkway (HWY 120), Dallas 30157, every Thursday @ 8:30am. Visitors, spouses and friends are welcomed.

The GA ARES State Meeting 2023 is scheduled for February 11 at the Georgia Public Safety Training Center in Forsyth, GA. Information: <https://www.gaares.org>

# **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, 1<sup>st</sup> Thursday of each month.

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

### **2023 Schedule**

Feb 2 \* Mar 2 \* Apr 6 \* May 4 \* Jun 1

For more information: Steve Walls, K4ELI: [swalls46@att.net](mailto:swalls46@att.net) (404) 697-9849

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

.....

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

W4TXA and the VE Team will be testing at 6:30pm at the 2735 Hiram Acworth Hwy  
(Hwy 92), Dallas, GA 30157, 2<sup>nd</sup> Tuesday of each month.

### **2023 Schedule**

Feb 14 \* Mar 14 \* Apr 11 \* May 9 \* Jun \* 13

For more information: John Reynolds, W4TXA, [w4txa.john@gmail.com](mailto:w4txa.john@gmail.com) (770) 715-9640

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

.....

### **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*

## 2023 Calendar

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

	<i>February</i>	<i>March</i>	<i>April</i>	<i>May</i>	<i>June</i>	<i>July</i>
<b>Meeting 1st Tuesday Date/Time:</b>	<b>2/7 7:00 PM</b>	<b>3/7 7:00 PM</b>	<b>4/4 7:00 PM</b>	<b>5/2 7:00 PM</b>	<b>6/6 7:00 PM</b>	<b>7/4 7:00 PM</b>
<b>Meeting Location</b>	TBA	TBA	TBA	TBA	TBA	TBA
<b>Meeting Activity</b>	TBA	TBA	TBA	TBA	TBA	TBA
<b>Additional Activities</b>	TBD	TBD	TBD	TBA	TBA	TBA
<b>Hamfest &amp; Conventions</b>	TBA	TBA	TBA	TBA	TBA	TBA

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

V2023.0

# 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)

---

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