

# CARS CARRIER

Charleston Amateur Radio Society

February 2015 Newsletter

CARS Web Site --- <http://www.wa4usn.org>

CARS meets the second Monday of each month at Ryan's Steak House on Highway 61.

**Our next meeting will be held at 7:00 PM, Monday, Feb. 9, 2015**



## PLEASE HELP

I received an e-mail that said "Please change my e-mail address to -----@----.com Thanks." followed by three letters which I assumed to be initials. There was no name or call sign. I hope that I guessed right.

When you make any changes to your e-mail address, home address, phone number, etc., please let me know but please also clearly identify yourself. I am not clairvoyant. John, WA4GPS

## EMERGENCY PREPAREDNESS

ARES Annual Report: 2014

Drills, Nets, Meetings, etc.

2013 --- 90 Events, 520 Hours

2014 --- 99 Events, 542 Hours

% Change --- +4.23%

Public Service Events

2013 --- 16 Events, 1179 Hours

2014 --- 18 Events, 976 Hours

% Change --- -17.22%

Emergency Operations

2013 --- 0 Events, 0 Hours

2014 --- 0 Events, 0 Hours

Total Operations

2013 --- 106 Events, 1699 Hours

2014 --- 117 Events, 1518 Hours

% Change --- -10.65%

Note: Slightly fewer Public Service event hours, fewer Hurricane Expo's 2014.

Again "THANK YOU" to everyone making the sacrifice of time and talents to support the Amateur Radio Emergency Service (ARES) for the Low Country and Charleston County.

Next event to start preparing for is the Cooper River Bridge Run on March 28, 2015.

Remember the Charleston Hamfest is Feb. 7, 2015, a great time to pick up extra gear for your "GO KITS" and any new gear needed. Ask yourself this question, "I wish I had/needed that (something) at the Marathon?"

I hope to see everyone at the Hamfest and the February Charleston County ARES meeting on Saturday February 21, 2015 at 0900 local time at St. Andrew's Public Service Building Hwy 7 and 61.

73 Rick, N8BKN

## DEC. FINANCIAL REPORT

Beginning Checking Balance - 12/1/14	\$5,186.93
Cash Receipts:	0.00
Cash Disbursements:	
AT&T - December	(74.89)
Ending Checking Balance - 12/31/14	\$5,112.04

Charlotte, KJ4PLX

## MINUTES of JAN. MEETING

### Charleston Amateur Radio Society

Club Meeting at Ryan's Steak House on Hwy.61  
Monday, January 12, 2015 at 7:00 PM

### MINUTES:

The Charleston Amateur Radio Society Meeting was called to order by President Gregory Amirault, KI4TVA, at 7:00 PM on Monday, January 12, 2015 at Ryan's Steak House in Charleston, SC.

**Introductions:** There were 43 people present.

**Secretary's Minutes:** Warren, KK4EVI

The November 2014 and December 2014 meeting minutes were published in the January 2015 CARS Carrier. A motion was made to accept the minutes as published, the motion was seconded, and passed.

**Treasurer's Report:** Charlotte, KJ4PLX

The October 2014 and November 2014 Financial Reports were published in the January 2015 newsletter and accepted as information.

**Museum Ships:** Ed, KQ4DC / David, KI4FSC / Tom, AJ4UQ

No report.

**Field Day:** Tom, AJ4UQ

No report.

**Races:** Doug, KU4OC

The Charleston Marathon Race should be covered. No word on time calling availability yet. Placards and Flags are available for pickup. The flags need to be returned. Box lunches will be available. We will be using the 146.790 frequency for Net Control and 146.580 for time calling.

Cooper River Bridge Run will be March 28<sup>th</sup>. Mark your calendar.

**Hamfest Report:** Greg, KI4TVA

The Hamfest tickets are ready to be handed out. Look on the WA4USN website for list of vendors that have already signed up.

**Repeater Report:** Bryce, K4LXF

No problem to report.

**Membership:** Bryce, K4LXF

Dues are past due for club membership.

Applications for regular membership:

First Reading: Michelle Mantooth, KK4WQO

Second Reading: None

**Emergency Prep:** Rick, N8BKN, Charleston; John, W4HNK, Dorchester; Dennis, KG4RUL, Berkeley

Next ARES meeting canceled for Marathon Race.

Had a total of 2060 man hours for Charleston County ARES.

Will have an ICS-300 class on February 17, 18 and 19 at the Charleston EOC.

With the cold weather coming in, may need to check the battery status on your HT's.

Berkeley will meet on January 31<sup>st</sup>, at the Moncks Corner EOC.

**Nets:** Warren, KK4EVI - Newcomers Net

**Newcomers Net** meets on Thursdays at 8:00 PM. If you are interested in trying to conduct a net, send Warren, KK4EVI, a note and he will get you the information.

**ARES Net** meets at Sunday 8:00 PM. Local area 5 meets from 8:00 - 8:20 PM then joins the statewide link up at 8:20 PM.

**QCWA Net** meets on Saturday at 9:30 AM. Chapter 89 is now in Charleston.

**SKYWARN Net** meets on first and third Tuesdays at 9:00 PM on the linked repeater systems.

**Lowcountry Digital Nets:** meets Sundays at 8:30 PM and Wednesdays at 8:00 PM on **145.700** MHz running Contestia 64/1000.

**TARC CW Training Net:** meets every Tuesday at 7:30 on linked repeater systems.

**SCHEART Net:** meets every Thursday morning at 9:00 AM.

**ARES HF Net:** Meets on 1<sup>st</sup> and 3<sup>rd</sup> Monday at 6:00 PM on HF 3.990 MHz primary and 3.9935 MHz alternate. Looking for more HF Logins, to support HF web.

**Newsletter/Website:** John, WA4GPS

Nothing new.

**Education & VE Testing:** Sheila, KT4YW

The next scheduled exam will be 1:00 PM on February 7, 2015 at the Hamfest.

**School Programs:** Alene, KG4NKD - DuBose Middle School Radio Club - K4DMS

No report.

**Communications Trailer:** Willie, WB4SOG

No report.

**Old Business:**

Jim KK4REM is planning to try to have two operating sessions in the Club Room aboard the Yorktown.

**New Business:**

**Announcements:**

A thanks went out to John KK4KBQ for stepping up and helping with the Newcomers Net.

Jenny WA4NGV gave a wrap-up about the Christmas Party. She mentioned about 49 people attended. A good time was had by all.

**Drawing:**

The drawing for a one year ARRL membership was won by Johnnie, KJ4DTG.

There being no further business, a motion was made, seconded and passed to close the meeting. The meeting was adjourned at 7:30 PM.

Respectfully submitted by Warren, KK4EVI

## **POLARIZATION: NORTH/SOUTH? POSITIVE/NEGATIVE?**

Let's try Vertical/Horizontal. Also there are circular, elliptical, diversity, and random—we won't go there. If you look up antenna polarization in the ARRL Handbook, they get into a discussion of E Plane (electric field) and H Plane (magnetic field), but that isn't necessary to grasp the bare-bones fundamentals. Just visualize the direction the elements run and that is the polarization. If your dipole or beam lies horizontally, the polarization is horizontal. Similarly, if it stands vertically, the polarization is vertical. If it is slanted, then it will exhibit characteristics of both.

But what about an Inverted Vee? Since both legs of the Vee are slanted, one might assume that it has characteristics of both; however since they are out of phase with each other, the vertical components mostly cancel each other and we are left with predominantly horizontal polarization. There may be some other marginal situations.

So why do we care? We covered some aspects of how polarization affects HF signals in the March 2014 issue of the CARS Carrier which I won't repeat here. VHF/UHF are a different story. To demonstrate, transmit a continuous signal with your Handi-Talkie (on a seldom used simplex frequency such as 146.55MHz) and pick up the signal on a Field Strength meter. Most free-standing SWR Meters can also be used as Field Strength Meters. If you have the option of using a longer antenna on the HT and/or the FS Meter, use longer antennas on both. This experiment will work best outdoors away from reflective metal objects (metal plumbing, electrical wiring, metal screens, etc.).

Position the FS Meter and the HT at least 2 wavelengths apart (about 12 feet for 2 Meters) with their antennas parallel. Transmit a continuous signal and adjust the FS meter to read full scale (this is a lot simpler if two people are doing it—one on the HT, the other adjusting and reading the FS meter). Then rotate the HT so that the antennas are at right angles to each other. You will see a dramatic decrease in the meter reading, about 20 dB—a 99% reduction compared to full scale reading! If you are near anything reflective (your car or a tree for example) it may distort the pattern producing random scatter of polarization so that the lowest reading is not as pronounced nor does the dip occur when the antennas are at exactly right angles to

each other. Also if the antennas on the HT and FS Meter are short, the dip on the FS meter will not be as low.

Almost all repeater antennas are vertically polarized. Simplex transmissions are usually vertically polarized. However, fixed stations working tropospheric propagation, or the occasional short skip that occurs on 2 meters, or SSB on VHF/UHF, nearly always use horizontal polarization. If you are interested in these modes, you might want to have horizontal polarization available for your fixed station.

73, Doc, W4MUR

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