



# The Spectrum

Issue 10

October 2008

## Words from the President

Our recent brush with Tropical Storm Hanna turned out to be pretty tame, and for that we should all be thankful. Hanna did provide CARS with an opportunity to sharpen our Public Service skills, and I am very proud of our members' response. We should consider that event as an exercise to prepare ourselves for a more serious challenge in the future, and learn from it what we can do to improve our readiness.

Many thanks to those who supported our Public Service response to the storm:

Keith	KG4ZXK	Bill	W1ATA
Sean	W5CDR	Forrest	WD5HQO
Barry	K5VIP	Jim	KG4WOJ
Bill	WF4R	Richard	WA4BUE
Vince	KJ4CCR		

The City of Chesapeake is also expressing their gratitude to those gents as well as to our club as a group.

Let's build on this experience and use it as a lesson to us all that Public Service is not a burden. The more of us that participate, the easier it is for everyone involved. It just requires a willing attitude and a little learning of the basic procedures that we provide in CARS' Public Service meetings each month. I hope to see you at these monthly meetings.

Congratulations to Vince KJ4CCR for earning his ARRL Volunteer Examiner's credentials last month. He will be a valuable asset to CARS and to ham radio as a VE. If you are a General or higher class license holder, you should consider becoming a VE. It doesn't cost anything, and it will be a very commendable feather in your cap that will give you a lot of satisfaction.

Elections for CARS officers will be held at our October 6 club meeting at the shack (7:30 pm). Be sure to be there! I'll report the names of the present slate of candidates furnished by the Nominating Committee elsewhere in this newsletter. But please, don't consider these to be the only nominees. We will still be accepting nominations from those present at the meeting up until the vote is taken. Any new nominees need to be there to acknowledge their willingness to serve.

Our September Dinner Meeting at the Moose Lodge was another fine event. I'm sorry some of you missed it. Mark your calendars for Monday, December 1 for CARS Christmas Dinner Meeting at the Moose Lodge. It will be a good escape from Thanksgiving leftovers!

73,  
Paul

## Links of Interest

[Virginia Beach Amateur Radio Club](#)

[Portsmouth Amateur Radio Club](#)

[Home - KG4ZXK.COM - IRLP and much more!](#)

[South Hampton Roads Sky warn Net](#)

[ARRLWeb: New US Amateur Bands Chart](#)

[ARRLWeb: FCC ULS Modifies Customer Support Hotline Hours](#)

[QRZ Amateur Radio Club International - Home](#)

[QRZ Ham Radio](#)

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## Upcoming Events

### Board Meeting

Wednesday, October 1st at 7:30 PM

### CARS Public Bus. Meeting

Monday, October 6th 7:30 PM  
116 Reservation Dr,  
Chesapeake, VA 23322-5204

### Shack Day

Saturday, September 18th at 10:00 to ??

### CARS Dinner Meeting

Monday, December 1<sup>st</sup> 7:30 PM  
Portsmouth Moose Lodge  
1400 North George Washington Hwy

## ELECTION OF CARS' OFFICERS

Our Nominating Committee has proposed the following list of candidates for Officers of the Club and members of the Board of Directors:

President:	Paul Buckwalter	K4PRB
Vice President:	Vince Williams	KJ4CCR
Secretary:	Phil Henline	WA9KFB
Treasurer:	Barry Priddy	K5VIP
Comm. Officer:	Jim Rogers	KG4WOJ

Any other nominations are welcome at the October 6 club meeting, so long as the nominee is present to affirm his willingness to serve.

## ARRL Continuing Education Online Course

Registration (Aug 27, 2008) -- Registration remains open through Sunday, September 7, 2008 for these online course sessions beginning on Friday, September 19, 2008: Amateur Radio Emergency Communications Level 2 ([EC-002](#)); Amateur Radio Emergency Communications Level 3 ([EC-003R2](#)); Antenna Modeling ([EC-004](#)); HF Digital Communications ([EC-005](#)); VHF/UHF -- Life Beyond the Repeater ([EC-008](#)), and Radio Frequency Propagation ([EC-011](#)). Each online course has been developed in segments -- learning units with objectives, informative text, student activities and quizzes. Courses are interactive, and some include direct communications with a Mentor/Instructor. Students register for a particular session that may be 8, 12 or 16 weeks (depending on the course) and they may access the course at any time of day during the course period, completing lessons and activities at times convenient for their personal schedule. Mentors assist students by answering questions, reviewing assignments and activities, as well as providing helpful feedback. Interaction with mentors is conducted through e-mail; there is no appointed time the student must be present -- allowing complete flexibility for the student to work when and where it is convenient. To learn more, visit the Continuing Education [course listing page](#) or [contact](#) the Continuing Education Program Coordinator

## LOCAL NETS

<b>SKYWARN NET</b> Wednesday 2000 Hours.	146.820 MHz
<b>CARS 2M Net</b> Sundays 2000 Hours	146.820 MHz
<b>CARS 10 Meter Net</b> 2000 hours on Mondays CARS doesn't meet	28.400 MHz
<b>Hampton Roads Public Service Net</b> Mon-Sat 2100 hours	146.970 MHz
<b>VBARC 10 Meter Net</b> 2000 hours on Thursdays VBARC doesn't meet	28.400 MHz
<b>Portsmouth "RagChew" Net</b> Monday & Wednesday 1930 hours	146.850 MHz
<b>Southeastern Virginia Traffic Net</b> Sun, Tues, Thurs @ 2000 hours	146.850 MHz
<b>Portsmouth Amateur Radio Emergency Services Net</b> Fridays 2000 hours	146.850 MHz
<b>Tidewater Radio Association WT4RA net</b> Thursday 1930 hours ( <a href="#">code drill follows net</a> )	147.195 MHz

## ELECTRICIAN'S CORNER

Being more efficient and complicated than a simple incandescent bulb, florescent tube lights have always interested me, and I was familiar with the old "starter" florescent fixtures that took several seconds to light up after power was applied. Those lamps ran line voltage through filaments at each end of the tubes to initiate electron flow when the filaments reached critical temperature, much like electron vacuum tubes. The familiar little "starter" device was a thermal switch that opened the circuit of each the filaments and left a series choke – the "ballast" – to limit the current through the resulting arc from one end of the tube through ionized gas to the other end of the tube. That was fairly straightforward if you grew up with this concept that was widely used for the past seventy or more years.

I've been very curious how this old technology was improved for today's "Instant Start" technology for florescent fixtures. Since having to change out several modern "Ballast" units recently and having to do some serious trouble shooting when one replacement didn't behave as predicted, I've been really surprised to learn how technology has moved forward. I hope this will be useful information for you someday.

The filaments in the florescent tubes are still there, but are not used in the instant start application. Filament connections on each end are strapped together and voltage is applied to the resulting single electrode at each end. Thus no warm up period is required before the controlled arc occurs through the tube. The arc is initiated by immediate application of High Voltage – 385 VAC RMS at unknown frequency – probably several hundred or several thousand Hertz (cycles per second for us older folks).

The little oblong black box that we used to call the ballast is now actually a solid state switching power supply that provides the high voltage and electronics circuitry to fold back the output once the arc is initiated in order to limit / control the arc's current to prescribed levels. Somehow it senses the load in order to know the proper output. It works properly with one, two, or three of the usual four tubes removed.

**Be careful** – instructions accompanying the replacement devices (\$30 each) stress treating them as 1000 Volt wiring per the NEC, and they also stress proper grounding to meet FCC part 18 rules for RFI.

Paul K4PRB

## Field Day 2008

Field Day 2008 for CARS was held at Deep Creek Locks Park in the Deep Creek section of Chesapeake.

A good time was had by all who attended. CARS ran as a 4A station which means we had 4 stations that were operating on 100% non commercial power. In addition to these stations we had a GOTA station and a VHF/UHF station to promote amateur radio with non-licensed individuals as well as gathering additional points for our Field Day Endeavors.

Phil Henderson, WA9KFB, did a fine job of making our new Field Day signs for the park entrance as well as our Catch the Wave Banner for the shelter. Rich Siff, WA4BUE and Barry Priddy, K5VIP, did an excellent job of running the GOTA station.

Besides generator power, Barry, K5VIP, ran a station under solar power, to garner additional points.

From Barry's Spud shooter, to the excellent lunch and dinner everyone had a great time.

We did have the honor of having then Mayor-elect Krasnoff join us for the reading of the proclamation declaring Amateur Radio Week and kicking off the contest.

There were too many people to mention here that made Field Day a success. I want to thank everyone that participated in the event. Do want to thank Joan Gorman, WJ4OAN, for bringing a lot of pile ups to the GOTA station. She had a great time and look forward to seeing her come out to next years Field Day!

## Field Day 2008 Cont

Here is the breakdown of the contacts:

160M	2 Phone QSO's		
80M	95 CW Contacts	1 Digital Contact	147 Phone Contacts
40M	60 CW Contacts	239 Phone Contacts	
20M	71 Digital Contacts	192 Phone Contacts	
15M	4 Digital Contacts	94 Phone Contacts	
10M	1 Digital Contacts	3 Phone Contacts	
6M	9 Phone Contacts		

Total CW Contacts: 155    Total Digital: 77    Total Phone: 774

Bonus Points:

- 120 GOTA Points
- 400 100% Emergency Power
- 100 Media
- 100 Public Set Up
- 100 Information Booth
- 100 NTS msg to Section Manager
- 10 Formal NTS message handled
- 100 Visit from Elected Official
- 100 Visit from served agency
- 60 Youth Participation
- 50 Web Submission
- 100 Educational Activity

Total BONUS points: 1,440

Total Contact points: 1238

Total Field Day Score submitted: 2,476

Please keep an eye out for QST to print the final results of all participants in Field Day. Look forward to seeing everyone come out and get on the air for Field Day 2009.

73  
Keith, KG4ZXX  
Field Day 2008 Chairman

**CARS BOD MEETING MINUTES      8 / 27 / 08**

Meeting called to order at 7:40 pm.

Attendees: Bill WF4R                      Richard WA4BUE      Paul K4PRB  
                 Barry K5VIP                      Keith KG4ZX              Sean W5CDR

Paul K4PRB read the last minutes. Barry K5VIP moved to approve as corrected. Seconded & approved.

Barry K5VIP, provided the Treasurer's Report, attached.

Paul K4PRB provided the Communication Officer's Report. Sean W5CDR concurred upon arrival.

**COMMITTEE REPORTS:**

Field Day: Our usual location at Deep Creek Lock Park has been reserved.

Springfest: We now know the dates of other relevant hamfests and public service events so we are ready to choose a date for Springfest and will do so in New Business.

Training: Combined General and Extra classes (by VBARC and CARS) are progressing well, with approx. 12 General students and 10 Extra students. A good proportion of students are CARS members.

VE: The next VE session may be Saturday, November 22, a week before Thanksgiving weekend.

Repeater: Putting the 444 repeater back in service is our next effort and should happen ASAP.

**OLD BUSINESS:**

Club Identification cards still need to be discussed with the City.

**NEW BUSINESS:**

Barry K5VIP moved to appoint Paul K4PRB as the chairman of the Nominating Committee. Seconded and approved.

Keith KG4ZK moved to recommend approval of membership of John Funke, K0GPN. Seconded & appvd.

Keith moved that March 22, 2009 be our first choice for Springfest. Seconded and approved.

Keith moved to reimburse Paul K4PRB \$35.64 for replacement floodlamp bulbs and a new motion sensor dual floodlight socket assembly. Seconded and approved.

Richard WA4BUE presented the outline of a Public Service recruitment presentation he is developing to give at WFOS and requested the help he needs in obtaining pictures of young operators for his slides. The BOD will attempt to provide same.

Meeting adjourned at 8:55

**CARS CLUB MEETING MINUTES      9 / 8 / 08**

Meeting called to order at 7:30 pm

Attendance: 27 members and guests

This was a dinner meeting held at the Portsmouth Moose Lodge, so the usual order of business was suspended.

Paul K4PRB recognized and thanked those who participated in the recent Tropical Storm Hanna activation of the Chesapeake EOC and the Oscar Smith High School shelter:

Keith	KG4ZXX	Bill	W1ATA	Sean	W5CDR
Forrest	WD5HQO	Barry	K5VIP	Jim	KG4WOJ
Bill	WF4R	Richard	WA4BUE	Vince	KJ4CCR

**ANNOUNCEMENTS:**

Paul K4PRB announced:

Virginia Beach Hamfest and VE sessions Sept. 20 and 21;

Our next Public Service meeting will be Wednesday September 17.

CARS is planning a one week Technician licensing class in November.

Vic W4VIC announced the QCWA convention in Virginia Beach Oct. 3 – 5.

**NEW BUSINESS:**

Paul K4PRB announced the Nominating committee's slate of candidates for the October election of officers:

President:	Paul	K4PRB
Vice President	Vince	KC4CCR
Secretary:	Phil	WA9KFB
Treasurer:	Barry	K5VIP
Comm. Officer:	Jim	KG4WOJ

Additional nominations were encouraged, but none were presented.

Phil WA9KFB moved to approve the membership of John Funke, K0GPN. Seconded and approved.

Bill WF4R moved that the club purchase and maintain one copy of each level of ARRL license manuals (Technician, General and Extra) for the club's library. Seconded and approved.

Meeting adjourned at 7:50 pm.

## Spectrum

Monthly newsletter of the Chesapeake  
Amateur Radio Service (CARS)

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### CARS : Repeaters

146.820 (PL 162.2) MHz  
146.610 MHz (PL 162.2)  
444.000 (PL 162.2)MHz

**W4CAR Trustee:** Bill Runyon WF4R

### CARS OFFICERS & CHAIRPERSONS

**President:** Paul Buckwalter K4PRB

**Vice President:** Gavin Wright KD7GJB

**Secretary:** Marshall Denny AI4CM

**Treasurer:** Barry Priddy K5VIP

#### **Communications Officer**

Sean Gorman W5CDR

#### **Past President:**

Keith Ainsley KG4ZXX

#### **Public Service/ Emergency Communications Coordinator:**

Sean Gorman W5CDR

**Repeater Committee Chairman:**  
Bill Runyon WF4R