



BRAZOS VALLEY AMATEUR RADIO CLUB



AMATEUR RADIO FOR SOUTHWEST HOUSTON AND FORT BEND COUNTY

AUGUST 2015

VOLUME 39 ISSUE 8



BVARC AUGUST GENERAL MEMBERSHIP MEETING

7:30 PM, Thursday, August 13th, 2015

421 Eldridge Rd, Sugar Land, 77478, Sugar Land Masonic Lodge

It's not Blue Bell

With no Blue Bell ice cream available, the BVARC annual the ice cream social had a major problem. We had to decide on having the annual event even with sub-standard, cheap imitations of an ice cream or do we cancel the event? I mean, no Blue Bell! It just seems ludicrous to even consider an event that has ice cream as its main "topic" without Blue Bell but that is what was being considered. So after many hours of teeth gnashing, it was decided to have the ice cream social without Blue Bell. We felt that BVARC could survive this one time without the official ice cream of Texas. So come out and enjoy the event to socialize and tell lies.



July Meeting Recap – It's a bird, It's a plane, no, it's a ham radio operator?

Andy MacAllister, W5CAM, did a wonderful presentation on the balloon launch teams and their achievements. Andy had short video showing one the launches from the beginning to the end and just what it takes to be successful in launching a balloon. As the video demonstrated, the balloon launches are a mixture of aerospace engineering, amateur radio, ballooning and photography. So next time you seen something like a balloon overhead, it just might be one from the Balloon Launch team (or just a ham that forgot to let go!). .



Upcoming Meetings

Below is a list of upcoming BVARC meetings. Mark your calendars so you won't miss out.

September 10 th	Antennas – Designing, Using and Troubleshooting	Rick Hiller, W5RH
October 8 th	D-Star	Alan, Isaachsen, KB2WF
November 12 th	Elections & Chili Supper	
December 10 th	Home Brew Night	Home built equipment
January 2016	Banquet	Date still being confirmed
February 11 th , 2016	Emergency Communications – Go Kit Building	Kerry Mallory, AE5JY

Keep those program suggestions coming in. Ideas are still needed for the general meetings. Remember, the general meetings belong to the membership and topics are needed. If there is a program you would like, let me know so it can be scheduled for a meeting.



The Vice Prez Says

The summer is coming to a close and everyone should know what that means – Ice Social Time! Even though the state ice cream (Blue Bell) is not available, BVARC will still have the annual event. So get you're your spoons ready and bring your appetite! Just to let everyone know, the change in meeting location is still moving forward. I have met with the Sugar Land Masonic lodge and we have finalized the contract for BVARC to use the their lodge as a monthly meeting location. Starting with the BVARC's annual ice cream social, the club will start meeting at the Masonic lodge monthly. The lodge will allow us to have a place that we no longer have to compete for or have limited time at or can be turned away at the last minute. The Sugar Land Masonic Lodge will give BVARC a place to grow and start a new chapter for the club. Come out to the ice cream social and take a look at the new digs! However just before we start to dive into the ice cream, we will be voting on an amendment to change the club's by-laws. With approximately 230 club members it has become next to impossible to obtain the required number of members for a quorum. Currently the requirement is 15 members or 25% of the membership, whichever is greater. So that 25% requires us to have 58 members present at a meeting for a quorum carry on club business. We found out last November that the annual chili supper was not enough of an enticement to bring in the required number for a quorum. So please make the ice cream social so we have enough for a quorum to vote on the change to the club's by-laws.

And to make the voting and Ice cream social more interesting, there will be a handheld radio raffle. Four, count them four, Baofeng dual band hand held radios will be available for raffle during the ice cream social. Throughout the meeting raffle tickets will be drawn for the Baofeng radio. How can you beat that – free ice cream and a chance to win a radio. However there is a catch, there radios will only be available if there are enough members for a voting quorum. If we do not have enough members present, the radios will be held for the November meeting when we will try and vote on the amendment again. So make sure you come out to the ice cream social and bring another club member.

Speaking of club elections, this November there will be several positions open. If you would like to help the club by volunteering your time to be on the board of directors, please contact some on the board and let them know. You can also have someone nominate you from the floor before the elections (this will be dependent if the meeting has enough for a quorum). Please see if you have time for one of the following positions: president, recording secretary, two year director, one year director. Please consider running for one of the positions on the BVARC board of directors.

Just to let everyone know, Bill is still going through chemo and treatment. I have been talking to and going by and seeing Bill. He is still eager to get back to the club so drop him an e-mail and say hi to him.

73,
Mike
N5VCX



Monday Night NET Updates

Don't forget the Monday Night Public Service Net starts at **8 pm** on 146.94 (167.9). The order of check-ins starts with mobile units first then fixed stations. If you have something for the net, make sure you let Net Control know about it when you check in. We are looking for Net Control Operators. Contact Mark, mark@mcgrath-co.com, if you are interested. Here are recent check-ins with control-ops:

4/13 - 25 - Rick, w5rh	5/18 - 27 - Cam, k5cam	6/22 - 24 - Pete, kd5qpx
4/20 - 20 - Ron, k5hm	5/25 - 16 - Pete, kd5qpx	6/29 - 22 - Ron, k5hm
4/27 - 32 - Pete, kd5qpx	6/1 - 24 - David, n5ekw	7/6 - 20 - David, n5ekw
5/4 - 19 - David, k5ekw	6/8 - 26 - Rick, w5rh	7/13 23 - Rick, w5rh
5/11 - 44 - Pete, kd5qpx	6/15 - 22 - Terry, k5pgf	7/20 - 15 - Ron, k5hm



BVARC Rag Chew Net July Check-Ins

As this newsletter goes to press, this information is not available. Look for a combined July – August Check-In list in the September issue.

BY LAWS AMMENDMENT NOTICE

Proposed amendment to be voted on at the August 2015 General Membership Meeting.

Thursday, August 13, 7:30PM, 421 Eldridge Rd, Sugar Land, 77478, Sugar Land Masonic Lodge

Change Article IV, Section A, Paragraph 1 to read:

A quorum shall be deemed to be fifteen (15) members or ten (10) percent of the Club's total membership, whichever is greater.

The current wording is:

A quorum shall be deemed to be fifteen (15) members or twenty-five (25) percent of the Club's total membership, whichever is greater.



Results of the July 14th BVARC Amateur License Examination Session by: John Moore, KK5NU

B-VARC sponsored and administered the ARRL's Amateur Radio Examination session that was held on Tuesday, July 14th 2015 at HCC's Scarcella Science & Technology Building here in Stafford, TX.

MEMBERS OF THE VE TEAM:

Richard Goldy, K5GOL

John Moore, KK5NU

Larry Jacobson, K5LJ

George Ontko, KM5VP

No candidates presented themselves for the examination session. At 1845 CDT the session was closed; with no results to report.

Many thanks to all the Team Members and Assistants who volunteer their valuable time and effort each month. All of us at B-VARC again thank everyone at HCC Scarcella Science & Technology Building for making these excellent classroom facilities available to us for our exams each month.

....73....



Hamfests

(within 200 miles of Houston)

Hamfest info for the next few months. More information at: <http://www.arrl.org/hamfests.html#listing>

08/07/2015 | [South Texas Section Convention \(Austin Summerfest 2015\)](#)

Location: Austin, TX

Type: ARRL Convention

Sponsor: Austin ARC and Texas VHF-FM Society

Website: <http://www.austinsummerfest.org>

10/03/2015 | [HamEXPO](#)

Location: Belton, TX

Type: ARRL Hamfest

Sponsor: Temple Amateur Radio Club

Website: <http://www.tarc.org/hamexpo/>

10/31/2015 | [South Texas Hamfest](#)

Location: Aransas Pass, TX

Type: ARRL Hamfest

Sponsor: South Texas Hamfest Association

Website: <http://www.southtexashamfest.org>



BVARC Historical Vignettes – The Warm-Up Series Hot Air Balloon Episode by Allen Mattis N5AFV, Club Historian

For many years BVARC provided communications for the Houston Marathon Warm-Up Series. The Warm-Up Series consists of an October 20K run, a November 25K run, and a December 30K run all held to prepare runners for the January Houston Marathon. The 1991 25K run was held at Cinco Ranch and BVARC was there providing communications.

Approximately twenty BVARC members worked the race including Carl Albrecht, Jr, KB5KJT, who was a high school student and had worked the Cinco Ranch 25K for the past three years. Just as net control announced that it was two minutes to start time Carl, KB5KJT, called net control. He calmly reported that a hot air balloon had just landed in the middle of Peek Road and was blocking the course. The balloon crew told him they could have the balloon moved to the side of the road in five minutes. Net control immediately advised the race director that the start should be delayed an additional five minutes and explained that a hot air balloon was blocking the course approximately one mile from the start line. Race officials delayed the start by another five minutes.

The following week BVARC received a letter from the race sponsors that stated “When a BVARC person said that in his opinion the balloon would be gone in five minutes, we knew it would be gone”. What a wonderful expression of confidence in both BVARC and in Carl, KB5KJT. This episode was the first time anyone in the Houston running community had ever heard of a race course being blocked by a hot air balloon.





Minutes of the July 9th, 2015 Board of Directors meeting of the Brazos Valley Amateur Radio Club

Mike Hardwick called the monthly Board of Directors meeting for the Brazos Valley Amateur Radio Club to at 5:35 PM on July 9th, 2015, at Sugar Land Masonic Lodge, 421 Eldridge Road, Sugar Land 77478.

Attending were:

Mike Hardwick N5VCX (V.P.), Bob Tomlinson N5JSL (Treas.), Michael Monsour ACØTX (Rec.Sec./Quart.), Stephanie Vessey K5SFV (Cor. Sec, QSL Manager), Scott Medbury KD5FBA (2yr At-Large Dir), Jerry Muller K9GEM (2yr At-Large Dir.), Darrel Kirk KC5JAR (1 yr At-Large Dir), Cameron Mitchell K5CAM, John Chauvin K5IZO Newsletter Editor/Parliamentarian, Ron Litt K5HM (Radio Sport), Pete Sauermilch KD5QPX, Nathan Vessey N5NYV

Meeting called to order at 5:35 pm

Reports:

- 1.1 A motion was made and approved to accept the June minutes
- 1.2 A motion was made and approved to accept the Treasurer's report.

Old Business:

- 2.1 Comments regarding the Masonic Lodge contract will be presented to the Masons. Garbage, for example from the Ice Cream Social will have to be carried away.
- 2.2 The Hamfest needs a wrap-up meeting and dates and location decided. A deposit has to be made to secure any site.
- 2.3 MSWE, turn out had four or five people. There were about ~ 122 contacts. Worst problem was with the raccoons that carried food away. The cabana interiors could not be used because of bird residue.
- 2.4 Field Day was hugely successful. ~4500 contacts, ~15,000 points, Dr David Woolweaver came by and said the BVARC operation was one of the largest in the state. The GOTO station had ~118 contacts.
- 2.5 General meetings: August 13th -Ice Cream Social; September 10th -Antenna design, October 8th -D-Star, November 12th -Chili Supper & elections,, December 10th -Homebrew night, January 15th -Banquet, February 11th -Ham Emergency deployment- Go Kits 101.
- 2.6 The banquet will be at the same place as last year.
- 2.7 Need to formalize committees such as, License classes, Meet and Greet, Retaining Members, Social Media and Membership participation.

New Business:

- 3.1 By-laws Amendment: With around 240 members obtaining a quorum of 25% is extremely difficult. There was discussion whether to drop the requirement to 15% or 10%. A vote was taken and the 10% quorum was picked.
- 3.2 Banquet date is tentatively Jan 15, Friday night.
- 3.3 A motion was made and passed to authorize \$300 for Ice Cream Social
- 3.4 A motion was made and passed to authorize \$150 for possible prizes for Ice Cream Social
- 3.4 Houston Ham Radio Club Extravaganza: BVARC would sponsor a giant a field day type two-day event at the fire-training field inviting all the clubs in the greater Houston area. This will be further discussed at later Board meetings.

Meeting adjourned at 6:39 pm

Submitted by Recording Secretary, Michael Monsour ACØTX



Where in the World is . . .
Armenia (EK)
CQ Zone 21

After working an Armenian Special Event station, EK100GM, I was motivated to do some research on this DXCC entity. I had no idea exactly where it is or if was even a country.

Armenia shares borders with Turkey, Georgia and Azerbaijan and claims it was the first nation to formally adopt Christianity (early 4th century).

The station was commemorating 100th anniversary of the Armenian Genocide which began in 1915, during World War I in the western portion of Armenia, the Ottoman Empire instituted a policy of forced resettlement coupled with other harsh practices that resulted in at least 1 million Armenian deaths.

Despite periods of autonomy, over the centuries Armenia came under the sway of various empires including the Roman, Byzantine, Arab, Persian, and Ottoman.

Armenian leaders remain preoccupied by the long conflict with Azerbaijan over Nagorno-Karabakh, a primarily Armenian-populated region, assigned to Soviet Azerbaijan in the 1920s. The Armenian economy has suffered in its development as a result of the prolonged conflict with Azerbaijan.

Armenia and Azerbaijan began fighting over the area in 1988; the struggle escalated after both countries attained independence from the Soviet Union in 1991. By May 1994, when a cease-fire took hold, ethnic Armenian forces held not only Nagorno-Karabakh but also seven surrounding regions, approximately 14 percent of Azerbaijan's territory.



The capitol, Yerevan is the economic and cultural center of Armenia. It presently maintains good relations with almost every country in the world, with two major exceptions, its immediate neighbors Turkey and Azerbaijan. Tensions were running high between Armenians and Azerbaijanis during the final years of the Soviet Union. The Nagorno-Karabakh War dominated the region's politics throughout the 1990s. The border between the two rival countries remains closed up to this day, and a permanent solution for the conflict has not been reached.

The country has a temperate climate with hot summers and cold winters. It is a landlocked mountainous country. Approximately 60% of the land is agricultural. Mount Ararat, which was historically part of Armenia, is the highest mountain in the region. Now located in Turkey, but clearly visible in Armenia, it is regarded by the Armenians as a symbol of their land. Because of this, the mountain is present on the Armenian national emblem today.

There are approximately 200 licensed amateurs in Armenia, according to QRZ.com. Armenia ranks 179th on the DXCC Most wanted list at on Club Log.

Reporting from the Dark Side,
Ron, K5HM
X
x





The Radio Hotel – The Antenna - Part 6 by W5RH

Verticals – How Low (angle) Can You Go?

We have all heard the phrases “Verticals radiate poorly in all directions” and “Verticals save space”. Well...Yes and No. (BTW, if you are new to hobby and have not heard these phrases, just wait, you will)

Verticals can radiate poorly in all directions, if not properly installed. And they do save space in the air, but make it up with what is needed on the ground in the “image” part of the vertical antenna system.

As the typical vertical is $\frac{1}{4}$ wavelength (wl) long, it by itself is not a resonant system. To be resonant you need at least $\frac{1}{2}$ “electrical” wl, which means we need another $\frac{1}{4}$ wl of wire – “Radials” to be more correct. Not wire in the air, but on the ground. So, yes, verticals do save space “up there” but not down here, if installed correctly, or better said, installed with the best performance in mind.

The real benefit of verticals in the HF bands is that their main launch angle -- aka “angle of radiation” -- is very low and that is with being mounted right on the ground. Reflect back to the last 2 months of **TRH** talking about horizontal antenna’s launch angle and patterns -- having to get $\frac{1}{2}$ wl or more above the Earth to get a lower angle of radiation. For DX, low angle is what we want – Ionospheric propagation of electromagnetic radiation is similar to a mirror’s reflection of a flashlight and the lower the angle the further it gets reflected. Plus, this low angle of radiation is in “every” direction – 360 degrees around the globe. OK, the “gain” (see last month’s **TRH**) isn’t so hot because it radiates everywhere, but you can’t snort at the low angle. So how best to optimize this low angle? 50% of the vertical system is the radial field -- those wires spread out in all directions on the ground, above the ground or below the ground (choose your poison). The better radial field you have the better the vertical antenna performs. There have been countless articles written about this situation by some of the stalwarts of Ham Radio Antenna Theory – (Google – Messieurs Brown, Severns, Orr, Cebik, Belrose and Christman)

Rob Sherwood, of the Sherwood Receiver Test fame, wrote in [Ham Radio May 1977](#) about an easy solution to the radial field dilemma of collecting the high return currents at the high current portion of the vertical system, which is right at the base of a $\frac{1}{4}$ wl vertical. It is a ground screen for about a 10 foot radius. (Google -- Sherwood Ground Screen)

In your Google searches you will find that all of these folks mentioned want to increase the efficiency of the return current collection and, therefore, provide a radiation pattern that has a very low angle of radiation. A poor radial field not only attenuates the whole radiation pattern, but you will see that the lowest angles (1 thru 5 degrees, and sometimes higher) are attenuated drastically. One contest team (“Team Vertical”) puts verticals in salt water right at the shoreline to achieve that low, low radiation angle. They do quite well in that salt water is a very good medium for near field RF current collection and far field reflection, etc. An alternate method is to raise the radials above the ground (elevated resonant radials or “counterpoise”), but the caveat here is that the lower the frequency the higher the radials must be above the ground to avoid the ground interfering with their proper operation. (A note for the Low Banders)

Discussion about verticals and radials can go on forever, but our Editor, John - K5IZO, says I must stop for this month. However, a 12 part treatise series was written in 1968 and 1969 in [CQ Magazine – Vertical Antennas](#) by Capt. Paul Lee – W3JM. It has also been compiled into a book - “The Vertical Antenna” published by CQ. If verticals are your thing, it is well worth reading the book or the articles.

Next time.... Shortening the antenna or Let’s get Loaded with Coils and Hats

*The purpose of **The Radio Hotel** is to give you a practical kickstart into exploring the workings of antenna systems. It is a series, so go back and read the previous columns to get the whole picture, as one month relies on the previous month’s information. Google the buzz words and find out what they mean. Read up on antenna system theory to see how it all works together. You will be glad you did.*



BRAZOS VALLEY AMATEUR RADIO CLUB

This newsletter is a monthly publication of the Brazos Valley Amateur Radio Club. For a full listing of officers and information about BVARC, please go to www.bvarc.org. Detailed information will be published in the newsletter every 3 months. Similarly, the "Eating Schedule" will be published every 3 months unless there is a change.

General membership dues are \$25.00 per year, with student dues \$10.00 per year, additional family members \$5.00 per member per year.

Club meetings are normally held on the 2nd Thursday of each month at 7:30 p.m. at the Eldridge Park Conference Center, 2511 Eldridge Rd, Sugar Land, 77478. Check the above website for any possible changes.

BVARC also administers amateur radio license exams on the 2nd Tuesday of each month at 7:00 p.m. at the Houston Community College's Scarcella campus in Stafford.

A Public Service Net is held each Monday at 8 p.m. on the 146.94 (minus offset, PL 167.9 tone) repeater.

A rag chew net is held each Wednesday at 7 p.m. on 3910 KHz +/- 3 KHz.

To obtain information about joining **BVARC** or its activities, contact the club's "Elmer," Ross Lawler, W5HFF at 281-701-7602 or see the BVARC website: www.bvarc.org

Other contacts include:

President:, Bill Stone, WS5H, dragntow@wt.net

Newsletter Editor, John Chauvin, K5IZO, k5izo@yahoo.com

NOTE: Every 3 – 4 months, this full officer's, club and eating info is published in the newsletter. For the intervening months, an abbreviated version is published but the complete info is on the BVARC website.

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AUGUST 2015

**BRAZOS VALLEY
AMATEUR RADIO CLUB
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SUGAR LAND, TX 77487-2997
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FIRST CLASS POSTAGE

August General Membership Meeting – Thursday, August 13.



If your mailing label is highlighted in color, it's time to renew your membership!