



BRAZOS VALLEY AMATEUR RADIO CLUB



AMATEUR RADIO FOR SOUTHWEST HOUSTON AND FORT BEND COUNTY

AUGUST 2002

VOLUME 25 ISSUE 8

Editorial - Our Club Needs Help!!

In the next few months, there will be elections for board members for the year 2003. Candidates for president, vice president, recording secretary, corresponding secretary, treasurer, and 3 year at large member are needed. Please contact Kevin, KD5O, if you are interested.

The BVARC October Newsletter will be my final newsletter to put together and edit. After that, the future of the newsletter is uncertain. Unless someone is found to become the editor, we may not be able to produce an expanded product.

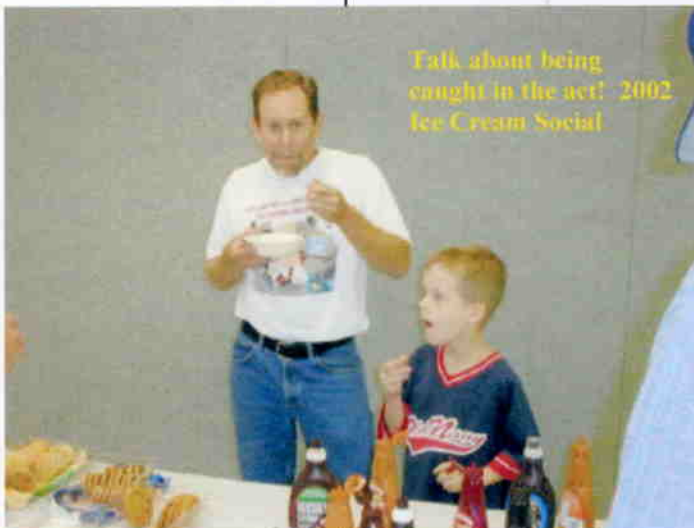
The Club's finances are not in great shape. Membership shows a steady decline and revenue from dues is getting smaller. The Club will have to cut back on expenditures for such things as hot dogs and annual banquet subsidies if membership continues to decline. We are almost in a situation where we will have to call upon our CD nest egg for help.

The Board has plans for a membership drive to encourage past members to renew their membership and commit to renewed participation in the club, but that may not be very successful. Fellow hams, the Club is skating on thin ice for survival. As a worst case scenario, we could end with less than a full board of directors, no newsletter, and/or serious cash problems. Please renew your commitment to the club if you aren't an active participant.

Cameron Mitchell, K5CAM
Editor
Brazos Valley Amateur Radio Club

President's Corner

This year's Board of Director's terms are coming to a close in just a few months. As you can tell from Cameron's editorial several areas of the club are in dire need of support. For Brazos Valley Amateur Radio Club to survive, we need to have the membership, the whole membership, support the club, not just a few dedicated individuals. Openings on the board and for the newsletter editor were mentioned several months ago and we had very few volunteers step forward.



When I was elected president, I had many ideas and plans to help the club grow. However due to the unpredictability of life, things changed at work and I was not able to devote as much time as I would like to the club. But even with a little effort some things were accomplished. Changes in the newsletter such as color editions as well as a style change for a more uniform format were done. Effort was put forward to help standardized the club's program schedule for a year in advanced, helping out the new group of directors each year. It may not be much but it is something that will help out the club in the long run.

When I took office, I did not want to make the club a soapbox for my favorite subject - public service events. Every time it was time to write something for the newsletter, I debated on just how much information I should put in the newsletter since I did not want to overwhelm anyone on public service events. With the membership not stepping up to help on club events, I even debated whether to put anything in the newsletter at all. I did not want to "rob Peter to pay Paul" on the small number of volunteers that were coming from the club (over 90% of the volunteers for public service events are from the same group. I average about 10 new people a year for public service events. I also lose about 12 people a year!). From what I can see, Brazos Valley Amateur Radio Club is experiencing a bad case
(Continued on Page 4)

**FIRST ANNUAL BRAZOS VALLEY AMATEUR RADIO CLUB MIX 'N' MATCH SWAP MEET!
NEXT GENERAL MEETING, SEPTEMBER 12, 2002**

2002 Club Officers:

President:
Mike Hardwick, N5VCX
n5vcx@worldnet.att.net

Vice President:
Robert Moore, KK5UO
kk5uo@hal-pc.org

Treasurer:
Rex Ritz, KC5EEU
icrex@yahoo.com

Corresponding Secretary:
Cameron Mitchell, K5CAM
k5cam@arrl.net

Recording Secretary:
Bill Allen, KC5IIU
william_allen@csicontrols.com

One-Year Board Member:
John Gilmore, AC5TL
johnnygilmore_1999@yahoo.com

Two-Year Board Member:
Paul Gray, N0JAA
n0jaa@aol.com

Three-Year Board Member:
Ross Lawler, W5HFF
w5hff@juno.com

Past President:
Kevin Foto, KD5O
foto@texas.net

Club Happenings:

General Meeting
Second Thursday each month-

Board of Directors Meeting
First Thursday of each month at
the
Sugar Land Community Center

Volunteer Examiner Program
BVARC administers Amateur
License Exams on the 2nd
Tuesday of each month.
Contact John Moore, KK5NU

Eating Schedule
Third Friday Dinner at 6:30.
Location announced in the
calendar.

Saturday morning breakfasts -
7:30 AM Viking Den,
Hwy 90A in Stafford and
7:00 AM New York Coffee Shop
9720 Hillcroft near Braeswood

B-VARC Board of Directors Minutes -- August 1, 2002

(Unapproved)

President Mike Hardwick called the meeting to order at 7:45 p.m. with a quorum.

Those in attendance were: President Mike Hardwick-N5VCX, 3-Year Director /Club Elmer Ross Lawler-W5HFF, Past President Kevin Foto-KD5O, Corresponding Secretary Cameron Mitchell -K5CAM, Vice President Report by Robert Moore-KK5UO

Treasurer Report by Robert Moore-KK5UO by proxy for Rex Ritz - KC5EEU: The check for the clubs insurance was discussed and it was decided that it must be paid as soon as possible. A motion to pay the check by the due date was made by Robert Moore and seconded by Bill Allen. The motion then passed unanimously. A motion to pass submitted reports was made by Kevin Foto and seconded by Robert Moore with amendments. Motion then passed unanimously. The \$125.00 dollar deposit from Steve Radack's office regarding field day was the item for amendment on the treasurer's report.

Recording Secretary Report by Bill Allen-KD5IIU: Reviewed the June 2002 BOD minutes. Motion made by Kevin Foto and seconded by Ross Lawler to approve June 2002 with corrections. Motion then carried unanimously. July minutes were tabled until next meeting.

Corresponding Secretary Report by Cameron Mitchell -K5CAM: Roster Details were discussed. Membership is as follows: 120 actual paid up to date with 78 members in the ARRL, 17 Life members and 132 newsletters sent out. Roster details were discussed.

Vice President Report by Robert Moore-KK5UO: A potential class for technician license was discussed.

3-Year Director Ross Lawler-W5HFF: There were general discussions about potential Tech and General classes.

2-Year Director Paul Gray-N0JAA: Not present due to personal reasons.

1-Year Director John Gilmore-AC5TL: Not present due to personal reasons.

Past Presidential Report by Kevin Foto-KD5O: Nothing to report at this time.

Field Day: The report was tabled until the next meeting.

New Business: There were discussions regarding the possible use of the 147.240 repeater for the club. Newsletter additions were discussed.

Old Business: None at this time.

Emergency business: The next newsletter editor was discussed. The upcoming Tailgate meeting/swap meet was discussed. The ice cream social details were discussed.

Motion was made to adjourn by Mike Hardwick and was seconded by Robert Moore. Motion passed unanimously and the meeting was adjourned at 9:25pm.

Respectfully submitted by Recording Secretary Bill Allen-KD5IIU.

The **December Meeting** will not be held in the Community Center due to a scheduling conflict with the City of Sugar Land. December is our "Home Brew" night and we will let everyone know as soon as possible on a location for the program. ***So get your "home brew" specials ready for the December meeting!***

The BVARC Board of Directors would like to thank **Lockard & White Telecommunications Engineers** for the production of the newsletter.

Brazos Valley Amateur Radio Club 2002 Ice Cream Social



Steve, Randy, and Scott enjoying the cold, creamy stuff.



Camerica, NSCAM, and Michelle



Really, there's enough to go around without sharing.



David, Ross, Ron, and Jack planning OEM activities



Unposed, action shot of Ron and Dennis.

Thanks Ross for all the hard work on putting the Ice Cream Social together!

President's Corner (Continued from page 1)
lethargy! With families and that strange need to keep food on the table with something called a job, sometimes there is just not enough time in the day to help out with the club. What we have to do is either make the club survive on what we can get from the membership or arrange or reorganize the club to better utilize what we have. I feel that the latter will be the only way that Brazos Valley will survive.

Just as the article started out, we need your help to do this. This club is for you and it is to help support the amateur radio hobby. If the membership cannot support the club, the club cannot support the hobby.

If you have any ideas or thoughts, contact any of the board members and let them know what your ideas or thoughts are. Since membership is slowly declining, an idea that I have is that the December meeting will start our 2003 membership drive along with "home brew" night. For the December meeting every member needs to do their best and bring one new person to the club meeting to sign up. We all know other hams that do not belong to a club so bring one of them along. Remember by helping the club, you will help the hobby.

Scanner Jack's Corner

Here are some school frequencies:

Alief	FT BEND	LAMAR
938.6375	488.8625	488.8375
938.6500	490.0375	
938.6625		
938.6750		
938.6875		

Now FT.BEND CO is now on Harris County and the Clodine Trunked Radio System. There is a new 1610 medium wave AM station. Car radios now can receive the National Weather Broadcast.

FROM
 SCANNER JACK
 JACK ROBERTS KB5TMY.

**Club Members to Conduct
 Tech Class Course**

Robert, KK5UO, and Ross, W5HFF, will conduct a Technician Class course beginning on Monday, September 19 and continuing for about six weeks. The classes will be at St. Paul Presbyterian Church, 7200 Bellaire. Classes are 7-9 PM in room 103. Contact Robert or Ross if more information is needed.

HOUSTON
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THE BVARC RAG CHEW NET

July 2002 by Sam Wilson, N5CPA

3962.5 KHz +/-3KHz Wednesdays at 7:00PM
 Please Note FREQUENCY CHANGE from 3960 KHz

Just WHAT IS the Rag Chew Net? Well it's a chance for you to get on the low bands and hang out with other BVARC members, as well as hams from around the south central US! WHAT?? Don't have voice privileges? Got a short-wave receiver? Dial in & listen, then check in using the telephone number announced at the beginning of each net.

- 7/03/02--N5CPA, K5CEK, K5VRJ, AB5BA, K5JWM, K5Hfy, WB5SRN, WB5VYR, N5HKV. (9)
- 7/10/02--K5Hfy (NC), K5CEK, KE5SR, K5JWM, W5GHK, N5CPA, K5VRJ, AB5BA, N5HKV, WA5VRB. (12) My thanks to Claude for calling the net while I had local interference.
- 7/17/02--N5CPA, K5CEK, KE5SR, K5LJ, K5JWM, WB5SRN, N5HKV, K5VRJ, AB5BA. (9)
- 7/24/02--N5CPA, N5HKV, WB5SRN, K5CEK, KE5SR, K5Hfy, K5VRJ, AB5BA, W5GHK, WB5VYR. (10)
- 7/31/02--KE5SR (NC), K5CEK, N5CPA, K5LJ, N5HKV, WB5SRN, K5JWM, K5VRJ, AB5BA, K5Hfy, W5GHK. (11) My thanks to Doug for calling the net while I had local interference.

BVARC PUBLIC SERVICE NET

Doug Woodruff, KC5VYZ - Coordinator
 The BVARC Public Service Net meets every Monday night on 145.47 (123 PL) at 9:00 p.m. Everyone is welcome. Check-ins and that night's net control:
 6/24 - 21 - Claude, K5Hfy
 7/1 - 22 - Cam, K5CAM
 7/8 - 23 - Kevin, KD5O
 7/15 - 21 - Joe, K5JWM
 7/22 - 19 - Jack, WN5A
 7/29 - 22 - John, K5LKJ
 8/5 - 25 - Cam, K5CAM
 8/12 - 19 - Kevin, KD5O
 8/19 - 24 - Joe, K5JWM

**RESULTS OF THE August 6th
B-VARC AMATEUR EXAMINATION
SESSION**

by: John Moore, KK5NU

B-VARC sponsored and administered the ARRL's Amateur Radio Examination session that was held on Tuesday, August 6, 2002 at HCC's Scarcella Technology Campus here in Stafford.

MEMBERS OF THE VE TEAM:

Larry Jacobson, K5LJ
John Moore, KK5NU
George Ontiko, KM5VP
Mark Winslet, KM5WR

Five examination elements were administered during the course of the evening to four applicants. Four unlicensed

candidates passed the Technician license exam; with the total passed elements being 4. The overall "pass rate" for the evening was 80%.

Congratulations to the following who passed an exam:

James C. Koonce - KD5TOM - Technician
Thomas G. Miller - KD5TOP - Technician
Edmund J. Steele - KD5TOO - Technician
John F. Wolfe - KD5TON - Technician

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 Technology Center for making these excellent classroom facilities available to us for our exams each month.

..... 73

Ross's Antenna Series -- Part I

Section I. VERTICALS:

HF verticals can be designed as $\frac{1}{2}$ or $\frac{1}{4}$ wavelength antenna devices. The $\frac{1}{4}$ wavelength antenna is in reality a $\frac{1}{2}$ wave antenna that utilizes earth plane or artificial ground plane to provide the missing $\frac{1}{4}$ length. Much has been written about construction of artificial ground planes and counterpoises and will leave that subject to the individuals' research. Several recent articles have been published in QST about counterpoise or grounding systems and should be of interest.

A *Vertical* antenna is often jokingly defined as an omni-directional antenna that radiated equally poorly in all directions. They possess some interesting properties and if fully understood, can be used to ones advantage and enjoyment.

Good quality HF verticals can be designed shorter than $\frac{1}{4}$ wavelength without sacrificing too much efficiency and will easily fit in ones backyard (and out of sight of the home-owners association watchdogs). Modified mobile antennas with a good ground plane or counterpoise will often work better than mounted on an automobile without a decent ground system.

Advantages:

1. Low cost of construction and easy to erect.
2. Great DX antenna.
3. Several can be phased to give additional gain
4. Could be stealth, if painted or used as a flagpole.
5. Can include traps to make it cover several bands.

Often overlooked is the design on higher HF bands (30, 20, 17, 15, 12 & 10 meters) the use of $\frac{1}{2}$ wave vertically polarized antennas or a $\frac{1}{4}$ wavelength built with a good quality ground or counterpoise system. The major advantage of any vertical is the apparent low angle of radiation. They are great DX antennas and for limited space application they are hard to beat.

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Several verticals can be arranged in favorable directions with $\frac{1}{2}$ or $\frac{1}{4}$ wave spacing, fed in phase or out of phase and thus one is able to steer the directivity and increase gain in a predetermined direction. Consult one of the antenna handbooks for details of how this is done, but 4 to 5 db gain can easily be attainable in a phased setup array. This is a great way to work Europe or Asia without putting up a tower and beam antenna.

For the lower HF bands (160, 80 & 40 meters), efficient shortened verticals $\frac{1}{4}$ wave can be designed utilizing inductive or capacity loading or a combination of both. As a rule of thumb, the longer or taller the vertical the better or more efficient the antenna will work. A good ground or counterpoise system is a must.

Do not overlook the possibility of using that mobile antenna at the home QTH. When used with a better quality grounding or counterpoise system, they can workout quite well. To future increase the mobile antenna's efficiency, try to increase the bottom section from the traditional 2 to 3 feet used on an automobile to 8 to 10 foot section of aluminum tubing, then add the mobile coil and top section. For 20 meters, I would recommend using a 17 or 15 meter coil as the longer bottom section will result in less coil (inductance) required. This is even easier if adjustable taps on a coil are used. Use a capacitive hat above the coil to fine-tune the antenna to you favorite portion of the band.

For VHF and UHF applications, verticals can become very simple to home construct. They can be made electrically longer $\frac{5}{8}$ or $\frac{1}{2}$ wave with additional resulting gain and improved lower angle of radiation. Even stacking several antennas result in future increase in gain. I recommend looking at the simple "J-Pole" or "Super J-Pole" antenna for ease of construction for 6, 2 meters, 225 and 440 MHz.

Disadvantages:

1. Subject to electrical noise (both man made and lightning)
2. Subject to static discharge induced noise
3. Low impedance feed point, if electrically shortened vertical
4. Not recommended for short hop communications due to low angle of radiation.

To reduce noise on a vertical antenna, it is my recommendation that some type of matching device be use at the base of the vertical antenna that results in the antenna being at electrical ground. To often we are overly eager to connect up the coax center conductor to that $\frac{1}{4}$ wave vertical and ground the coax shield to the grounding system, i.e. ground rod or counterpoise system. It is my recommendation that at the base feed point you add a 1:1 balun or if a shorter than $\frac{1}{4}$ wave antenna, possibly an impedance matching balun or coil be used. This allows the vertical antenna to be at ground potential, gives a bleed-off path for static buildup and just may save your expensive transceiver from taking a direct lightning hit.

If you are looking to talk with your old friend about 200 miles away or closer on 75 or 40 meters, then **don't** plan on using a low angle of radiation antenna like a vertical. A simple dipole or loop antenna at relative low electrical height will out do the vertical antenna. **But**, if you are interested in doing some DXing or talking to the East or West coast please try the vertical antenna.

My hope is that this article stirs up your interest in experimenting with vertical antennas. The next article will deal with loop antennas.

First in a Series of Antenna Article
Written by:

E. "Ross" Lawler, Jr. - W5HFF
BVARC's Club "Elmer"

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