



BRAZOS VALLEY AMATEUR RADIO CLUB



AMATEUR RADIO FOR SOUTHWEST HOUSTON AND FORT BEND COUNTY

JANUARY 2003

VOLUME 27 ISSUE 1

President's Corner

With the new year come new plans for Brazos Valley Amateur Radio Club. In February, the program will be for new hams and new members. Hopefully, this will become a tradition for the club each February. Bringing in new hams and/or new members will introduce someone who is interested in the hobby not only to the club but also to all the different areas of interests in the amateur radio hobby. It will allow people to learn more about the hobby, and if they have just recently received their license, it will give them a place to enjoy the hobby. If you know someone like this, bring him to February meeting.

After the weekday evening swap meet last September, the board and several club members decided that another swap meet would again benefit the club. So on Saturday, March 15th at the Sugar Land community Center, the **2nd Annual Mix & Match Swap Meet** will be held. For preparation, the entire community center has been reserved for the club on March 13th, 2004 for the swap meet. This will help the club raise money as well as allow the club become more active in amateur radio.

The Arthritis Foundation has asked BVARC to participate in its **2003 Mini Grand Prix** fundraiser on March 1st. They have appreciated the support and communications that we have provided them over the last several years and asked me to present this offer to the club to drive one of the ten cars that will be racing simultaneously in a state-of- the art indoor racing

facility. Three-person teams will race in the mini-racers and all drivers will receive a souvenir professional racing helmet. The Le Mans Enduro Races are set up relay-style allowing all drivers an opportunity to contribute to an overall team victory. The winning team will attend a 2-day advanced Shifter Kart course at Bob Bondurant School of High performance driving in Phoenix, Arizona. If you would like to be one of the drivers, contact one of the board of directors.

Many things coming up this year for Brazos Valley Amateur Radio Club. Remember that it takes the club members to make the club.



Mike Hardwick Presents Cameron Mitchell with the Order of the Key

2003 Awards Banquet

Thirty-seven people attended the annual BVARC Awards Banquet on January 10th at the Saltgrass Steakhouse. As people were finishing their main courses, President Mike Hardwick began announcing awards.

Award Recipients:

- Cameron Mitchell, K5CAM, The Order of the Key
- Charles "Frosty" Frost, K5LBU, Loop and Zepp Award
- Larry Jacobsen, K5LJ, The Dr. Bill Award

The following individuals received appreciation awards:

- Kevin Foto, KD5O
- Claude Sessions, K5HFY
- Doug Woodruff, KC5VYZ
- Sam Wilson, N5CPA
- Orin Snook, KB5F, Special Appreciation Award

Field Day is just around the corner and we need to start planning for it now. Do you have an idea about how to make it better? How to have a higher score? How to scare off all the mosquitoes and other creepy crawly insects? Now is the time to plan for the June Field Day. Contact a board member if interested in working on the organizational committee for the 2003 Field Day!

2003 Club Officers:

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

Acting Vice President:
Ross Lawler, W5HFF
w5hff@juno.com

Secretary/Treasurer:
Ron Eisenbrey, AB5WG
ab5wg@mylinuxisp.com

Corresponding Secretary:
Joe Morgan, K5JWM
k5jwm@att.net

One Year Board Member:
Dave Scott, WD8RZA
wd8rza@aol.com

Two 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,
Sugar Land Community Center,
210 Matlage Way

Board of Directors Meeting

First Thursday of each month,
Sugar Land Community Center,
210 Matlage Way

Volunteer Examiner Program

BVARC administers Amateur License
Exams on the 2nd Tuesday of each
month at the HCC Scarcella Technology
Campus, 10141 Cash Rd. in Stafford.
Contact John Moore, KK5NU

Eating Schedule

Third Friday Dinner at 6:30 p.m.
Location announced in the calendar.

Saturday morning breakfasts –

7:00 a.m. New York Coffee Shop
9720 Hillcroft, Houston
7:30 a.m. Viking Drive In
2939 S. Main, Stafford

Rag Chew Net

Monday night on 145.47 (123 PL) at
9:00 PM

Public Service Net

3910 KHz +/-3KHz Wednesdays
at 7:00 p.m.

Minutes of Brazos Valley Amateur Radio Club Board of Directors Meeting (UNAPPROVED)

January 2, 2002

Attendees: President: Mike Hardwick-N5VCX; 2-Year Director/Club Elmer, Ross Lawler-W5HFF; Past President: Kevin Foto-KD5O; Corresponding Secretary/Treasurer, Ron Eisenbrey-AB5WG; 1-Year Director Dave Scott, WD8RZA; Recording Secretary: Joe W Morgan-K5JWM; Cameron Mitchell, K5CAM; and Robert Moore, KK5UO.

Comments: Cameron discussed using pay-pal for online membership and renewal. Make sure PO BOX is up to date. Field Day 2003 talk about being at Fort Bend County Fire Training Center. Ron said he would be willing to do March program about RF line noise.

Emergency Business: By-Laws need to be read and approved by Board [at the] next meeting.

Temporary replacement for Vice President was filled by Ross Lawler 2-Year Director/Club Elmer.

Old Business: There were discussions about banquet and Awards for 2002.

New Business: Discussion about February program new ham and new member night. Need calendar updated for the year. There were discussions on the March 15th-Tailgate Sale.

Announcements: MS150 April 12th & 13th, 2003

BVARC members it's time to start volunteering for Field Day 2003.

Adjourn: 8:45 p.m.

Submitted by Recording Secretary Joe W. Morgan, K5JWM

Happy New Year from all the board members

Public Service Events

By Mike Hardwick, N5VCX, President

Here are some events for the rest of the year. Come out and help. Put your license and radio to a good use. If you like the hobby, this on of the best ways to promote the hobby and help a worthy cause at the same time. Remember, one of the main reasons for amateur radio is to help the community. If you are interested in any of these events, give me a call and I will send you information on the event. Call me at 713-771-4625 or e-mail n5vcx@arrl.net.

Frost Bike 50 Bike Ride

n5vcx@arrl.net, Cy-Fair High School, February 2nd, 2003, 15 operators needed

Bayou City Classic 10K Run

n5vcx@arrl.net Downtown Houston, March 8th, 2003, 15 operators needed

The Bluebonnet Century Bike Ride

n5vcx@arrl.net, March 23rd, 2003, 25 operators needed

The Tour de Cypress Bike Ride

n5vcx@arrl.net, March 30th, 2003, 25 operators needed

The Space Race Clear Lake/NASA Bike Ride

nlance45@swbell.net, March 9th, 2003, 30 ops & net control needed

MS150 Bike Ride

n5vcx@arrl.net, Saturday & Sunday, April 12th & 13th, 2003 120 hams needed

Rag Chew Net

By Joe Morgan, K5JWM

January 2003

NOTE FREQUENCY CHANGE 3910 KHz

3910 KHz +/-3KHz Wednesdays at 7:00 p.m., Joe Morgan, K5JWM, Net Coordinator

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 and listen, then check in using the telephone number announced at the beginning of each net.

12/04/02-K5JWM, K5CEK, KB5F, K5HFX, N5CPA, WB5SRN, WA5VRB.(7)check-ins

12/11/02-K5JWM, KE5SR, K5CEK, N5CPA, K5HFX, WB5SRN, WA5VRB, K5LJ, KD5O.(9)check-ins

12/18/02-K5JWM, K5LBU, K5LJ, K5CEK, K5VRJ, AB5BA, K5HFX, W5DDD, WB5SRN, KM5AG, KE5SR, N5CPA.(11)check-ins

Amateur Radio Testing

Results of the January 14th Testing Session

by: John Moore, KK5NU

BVARC sponsored and administered the ARRL-VEC Amateur Radio Examination session that was held on Tuesday, December 10th, 2002 at HCC's Scarcella Technology Campus here in Stafford.

Members Of The VE Team:

- Larry Jacobson, K5LJ
- John Moore, KK5NU
- George Ontko, KM5VP
- Don Schexnaider, AB5IV
- Mark Winslet, KM5WR

Seven examination elements were administered during the course of the evening to four applicants. One unlicensed candidate passed the Technician license exam, and another received a General class license. Two others passed Element 3 with the total passed elements being six. The overall "pass rate" for the evening was 86%.

Congratulations to the following who passed an exam and/or upgraded:

- Jason Bills, KD5UVZ, Technician
- John A. Chauvin, II, KD5UVW, General
- Thomas Galetic, W5MUM, Element 3

- Robert E. Real, N5YOD, Element 3

Many thanks to all the team members and assistants who volunteer their valuable time and effort each month. All of us at BVARC thank everyone at HCC Scarcella Technology Center for making these excellent classroom facilities available to us for our exams each month.

Public Service Net

Doug Woodruff, KC5VYZ - Coordinator

The 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:

12/30-24, John, K5LKJ

01/06-18, Cam, K5CAM

01/13-31, Kevin, KD50

01/20-25, Joe, K5JWM

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Loops

Second in a Series of Antenna Articles by: E. "Ross" Lawler, Jr., W5HFF, BVARC's Club "Elmer"

Section 2.

HF Loop antennas can be constructed in various shapes and sizes. From round, to square, to triangular and variation upon each of these. Note: A ½ wavelength folded dipole antenna made with twin-lead and feed on one side by twin-lead balance feed or feed through a 4:1 balun is actually a loop antenna.

Loops are generally one (1) lambda in electrical length and can be cut using the formula $1005/f$ resulting in length in feet. Several loops can be constructed using common spacers or spreaders for the higher HF or VHF bands. Loop antennas form the basic building block for quad antennas. Place a reflector loop or a director loop or both with adequate spacing to the loop antenna and you have expanded the basic loop antenna into a quad beam antenna.

Awards Banquet, Jan. 10th, 2003



Darrell, Anita, and Claude enjoying dinner at Saltgrass Steakhouse



Frosty with the 2002 Loop and Zepp Award



Mike Hardwick presents Larry Jacobsen with the 2002 Dr. Bill Award



Cameron Mitchell grins as he receives the Order of the Key



Mike Hardwick presents Doug Woodruff with an Appreciation Award

Additional Pictures on the Web at:
<http://bvarc.freeshell.org/images/banq2003/index.html>

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713 757-0588
713 228-1044 fax

Loops

*continued from page 3***Advantages:**

1. Exhibit some Gain in comparison with dipole antenna.
2. Do not require ground plain or counterpoise system.
3. Have higher feed-point impedance.
4. At low electrical height exhibit high angle of radiation; thus good for local communications on low HF.
5. At higher electrical height, angle of radiation is reduced and loop becomes a good DX antenna with gain.
6. Can be used on several bands due to harmonic relationship.
7. Exhibits low receive noise characteristics.
8. Operates over broader portion of the band.

For HF use, loop antennas have numerous advantages. They can be electrically feed to act as a vertical or horizontal polarized antenna. Depending on the number of supports one has available, they can be arranged as a triangle or square and hung either vertically or horizontally. Some have used the parameter of their yard and been able to erect large loop antennas that will work on the low HF bands.

From the one lambda formula above a loop antenna for 75 meters or 3.800 MHz would require 265 feet of wire. The resulting open loop antenna will have a feed point impedance of approximately 200 ohms. Loop antennas do not rely on earth ground, but are still influenced by ground reflectance and height above ground. Therefore, loops are still an effective radiation antenna even at low heights, but most of the radiation is almost straight up.

In comparison with a standard $\frac{1}{2}$ wavelength dipole the loop antenna exhibit about a 2.5 db gain. This resulting gain is off the sides of the loop, much as would be expected from a dipole antenna. You may then have the ability to favor one direction over another or even erect two loops at 90 degrees to each other and switch between them. For higher HF or VHF, rotating a loop antenna is practical and it will out perform a rotate-able dipole.

Disadvantages:

1. At low electrical height it is not a good choice antenna for DX work.

2. Feed point impedance requires some matching device such as 4:1 balun.
 3. Requires more support structures and more antenna wire.
 4. Structurally more difficult to keep erected.
- Note that the advantage listed for loop antennas above far out way to shorter list of disadvantages.

Many variations of loop antennas have been tried and understanding their characteristics can result in tailoring one just for your needs. If you have four poles and can place them around at the corners of your lot, try erecting a 265 foot horizontal loop and feed it with a 4:1 balun and enjoy talking to everyone on locally on 75 meters. By opening the mid point, this antenna will load as a dipole for 160 meters. Most have found that this loop will also load as a 2-lambda loop on 40 meters if you have an antenna tuner.

One of the earliest antennas I tried in the '70 was using my metal flashing around the parameter of the house as a loop antenna. I cut out a small section of the sheet metal and checked that it did make continuity around the house parameter then loaded it up on 20 meters using an antenna tuner. Yes, we had antenna restrictions even back then and this was my stealth answer to the problem. First contact was Australia and it worked nicely.

At present, I am using a 265 foot, 75 meter loop in the form of a triangle off the side of my 60 foot tower. It has a 30 degree slope and the bottom is approx. 10 feet off the ground. It is feed with a 4:1 balun at the top apex thus it is horizontal polarized. It has been the first antenna that I have been able to work Europe consistently on 75 meters while running only 100 watts. It also works great on 40 meters and is mush quieter than the 40 Meter vertical antenna that I also have erected.

Once again, I hope that this article stirs up your interest and stimulated you into trying a loop antenna. They do work well and if you can better understand their limitations; you can make one work for you. The next article will deal with beam antennas.

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BRAZOS VALLEY AMATEUR RADIO CLUB

2003 Membership Application

Check One:

New Membership

Renewal

Roster Update ONLY

Regular membership dues are \$20.00 a year. Lifetime Memberships are \$160.00. Additional family members may join BVARC for only \$2.00 a year each with no additional copy of the newsletter.

Name: _____ Call: _____

Additional Family Members: _____ Call: _____

Additional Family Members: _____ Call: _____

(Note: If this is a renewal, please indicate only changes in personal information. Thanks.)

Address: _____ Day Phone () _____

_____ Zip+4: _____ Eve Phone () _____

e-mail address: _____

Main area of interests in amateur radio: _____

License Class:

ARRL Membership?

Novice General

Life

Technician Advanced

Annual

Tech+ Extra

Not a member

Former Ham Not Yet a Ham

I agree to observe the By-Laws of Brazos Valley Amateur Radio Club and rules and regulations of the Federal Communications Commission.

Signature: _____ Call: _____ Date: _____

Remittance:

Regular Membership _____ + Family Membership _____ = \$ _____

LIFE MEMBERSHIPS* at \$160/Person _____ = \$ _____

TOTAL = \$ _____

Please make checks payable to BRAZOS VALLEY AMATEUR RADIO CLUB and write your call sign, if any, on your check. Send this form and your check or money order to:

**Brazos Valley Amateur Radio Club
P.O. Box 1630
Missouri City TX 77459-1630**

Calendar - February 2003

SUN	MON	TUE	WED	THU	FRI	SAT
						1 See *below
2 Frost Bike 50 Bike Ride	3 Net 9:00 p.m. 145.470 MHz	4	5 HF Net 7:00pm 3910 +/-3KHz	6 BOD Meeting 7:30 p.m.	7	8 See *below
9	10 Net 9:00 p.m. 145.470 MHz	11 VE Session 6:30 p.m.	12 HF Net 7:00pm 3910 +/-3KHz	13 Club Meeting 7:30 p.m.	14	15 See *below
16	17 Net 9:00 p.m. 145.470 MHz	18	19 HF Net 7:00pm 3910 +/-3KHz	20	21 See ** below	22 See *below
23	24 Net 9:00 p.m. 145.470 MHz	25	26 HF Net 7:00pm 3910 +/-3KHz	27	28	

* **Saturday Breakfast: New York Coffee Shop at 7:00 a.m. and the Viking Drive Inn at 7:30 a.m.**

** **3rd Friday Dinner: Feb. 21, 6:30 p.m. - Hickory Barn Barbecue, 11534 Wilcrest, 1-1/2 blocks north of the SW Frwy.**

Calendar - March 2003

SUN	MON	TUE	WED	THU	FRI	SAT
						1 See *below
2	3 Net 9:00 p.m. 145.470 MHz	4	5 HF Net 7:00pm 3910 +/-3KHz	6 BOD Meeting 7:30 p.m.	7	8 Bayou City Classic 10K Run
9 The Space Race Clear Lake/NASA	10 Net 9:00 p.m. 145.470 MHz	11 VE Session 6:30 p.m.	12 HF Net 7:00pm 3910 +/-3KHz	13 Club Meeting 7:30 p.m.	14	15 Mix&Match Swap Meet MS150 Volunteer Training
16	17 Net 9:00 p.m. 145.470 MHz	18	19 HF Net 7:00pm 3910 +/-3KHz	20	21 See ** below	22 See *below
23 Bluebonnet Bike Ride Hempstead	24 Net 9:00 p.m. 145.470 MHz	25	26 HF Net 7:00pm 3910 +/-3KHz	27	28	29 See *below
30 TourdeCypress Bike Ride West Houston	31 Net 9:00 p.m. 145.470 MHz					

* **Saturday Breakfast: New York Coffee Shop at 7:00 a.m. and the Viking Drive Inn at 7:30 a.m.**

** **Third Friday Dinner: Mar. 21, 6:30 p.m. - Panda Garden Chinese Restaurant, 1043 Eldridge Rd. at Jess Pirtle Blvd. in Sugar Land**



**Monthly Publication of the Brazos Valley Amateur Radio Club.
Serving Amateur Radio for Southwest Houston and Fort Bend County**

Club Call sign - KC5OIG
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John Moore, KK5NU, jwm@hal-pc.org

The Brazos Valley Amateur Radio Club (BVARC) was organized in 1978, primarily as an emergency communications group available to assist the communities of Missouri City and Stafford when required. Since that time, BVARC has grown and expanded its activities to become the most active amateur radio club in Southwest Houston and Fort Bend County.

Today, BVARC is truly a general interest club with an impressive record of Public Service. The American Radio Relay League (ARRL) has recognized the clubs commitment to service with the coveted status of Special Service Club. We are proud of our members who represent the some of the finest in amateur radio. Membership is not limited to licensed operators, but is open to anyone with an interest in amateur radio. Meetings are at 7:30 p.m. on the second Thursday of each month, at the Sugar Land Community Center. Talk-in assistance is available in the 145.470, and 444.550 MHz (PL 123.0) repeaters. Membership dues are \$20 per year.

BVARC sponsors ARRL-VEC license exam sessions on the 2nd Tuesday of each month. A Public Service Net is held at 9 PM. each Monday on the Memorial Emergency Radio Association's 145.47 & 444.55 repeaters.

To obtain information about joining BVARC or its activities, contact Ron Eisenbrey, 281-491-7823. New members and prospective hams should contact the Club's "Elmer", Ross, W5HFF at 281-342-3340 or w5hff@juno.com.

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**BRAZOS VALLEY
AMATEUR RADIO CLUB
P.O. BOX 1630
MISSOURI CITY TX 77459-1630
ADDRESS SERVICE REQUESTED**

FIRST CLASS POSTAGE

Don't forget New Ham and New Member at the next general meeting!

**Also Coming up
2nd Annual Mix & Match Swap Meet
March 15th , 2003
8:00 a.m. Sugar Land Community Center**