

the B-VARC BULLETIN

The Monthly Publication of The Brazos Valley Amateur Radio Club

Volume 19 Issue 4

April 1996



President:

Ron Grimes—WASSCE
(713) 341-7137

Vice-President:

Louis House—KD5GM
(713) 498-5639

Recording Secretary:

Jackie Burton—KC5OHJ
(713) 460-1968

Corresponding Secretary:

Jim Cahanin—KB5TBZ
(713) 438-0927

Treasurer:

Pete Norris—KJ5SS
(713) 342-9089

3-Year Board Member:

Terry McCoy—KK5RL
(713) 641-4595

2-Year Board Member:

Bud King—NSUOG
(713) 494-3741

1-Year Board Member:

Claude Sessions—K5HFY
(713) 242-6069

Past President:

Carl Cunert—WB8SVR

NOTE FROM THE PRESIDENT

by Ron Grimes—WASSCE

Have you ever noticed how B-VARC members during the morning and evening drive times make the MERA repeater sound like PBS? You can find out anything from how to decimate your lawn's slimy slug population to detailed discussions about things such as ham radio, antennas and electronics.

Response to our February and March programs have shown a number of our members are interested in technical and hands-on equipment aspects of the hobby. We have learned how a little bit of wire and metal can be thrown together to make a simple antenna system. And we now know all the ins and outs on buying, selling, and swapping gear. Our speakers' years of experience and technical expertise was evident during their presentations.

All you old timers think back, now, to the days when you were just getting started. Do you remember worrying about just exactly how to put together your station? What components did you think you needed? Really need? Or just want? Were you sure about how to put up and adjust that dipole? Did you solder that PL-259 correctly? When you turned it all on, what were you supposed to say? Should you send a QSL? Did you know what to say on the QSL?

B-VARC is constantly being discovered by new or recently licensed hams that need a little help to get more out of their new hobby. To offer these newly licensed hams a forum for learning more about the basics of ham radio, we are going to start the B-VARC New Ham Corner at our general meetings. A space will be set aside at the Thursday night meeting from about 7:15 to 7:30 where an experienced member will host a session on topics of interest to beginners. This will be a time when the less experienced hams (and some older ones, too) will be offered a chance to see, learn, and do on a personal level rather than just being a voice in a crowd.

If anyone is interested in hosting a session, please let me know and I will schedule you in.

P.S. Field Day is June 22-23 - Time to start planning!!

FROM THE EDITOR

by Jackie Burton—KC5OHJ

Due to an overwhelming, but appreciated response to my BEGGING for newsletter articles, I actually have no extra room in this month's issue. I also wish to thank all contributing editors for meeting the deadline so promptly. I can't tell you how much it is appreciated. Since I have been sick most of this past week, I have not had time to think of anything to put in the newsletter. I am excited, however, about the new B-VARC web page on the Internet. For those of you who are interested, the address is given in John Moore—KK5NU's column on the Internet in this issue. See you next month!

The Editor

HOUSTON HAM INFO. LINE

The Ham Information Line is available 24 hours a day by calling 495-3495 with a touch tone phone. Information on local clubs and test sessions is provided.

SPECIAL THANKS

All of us at B-VARC would like to extend our gratitude to the management at KHTV, Channel 39, for the use of their equipment and facilities in order for this bulletin to be published.

We would also like to thank Claude Sessions—K5HFY, and all the other B-VARC members who volunteer their services in helping to put the bulletin together. It couldn't be done without you.

B-VARC BOARD MEETING*by Jackie Burton—KC5OHJ*

A quorum of the Board of Directors met at the Sugar Land Community Center on March 7, 1996. This was the third board meeting of the calendar year. The meeting was called to order by President, Ron Grimes—WASSCE, at 7:30 p.m. The following Board Members and guests were present: Ron Grimes—WASSCE, Louis House—KD5GM, Jackie Burton—KC5OHJ, Pete Norris—KJ5SS, Jim Cahanin—KB5TBZ, Terry McCoy—KK5RL, Bud King—N5UOG, Claude Sessions—K5HFY, Allen Mattis—N5AFV, Sam Wilson—N5CPA, George Jolly—ND5E, John Moore—KK5NU, and Steve Gottlieb—WASOEN.

President, Ron Grimes, asked Steve Gottlieb—WASOEN, to give a report from the audit committee appointed to audit the treasury records for 1995. The Committee consisted of Steve Gottlieb—WASOEN and Steve Dunkelberger—N5JBL. Steve stated that overall, the books were okay and that the committee was satisfied with what they saw. He stated that the only things that needed to be mentioned were: (1) the annual banquet needed to be documented in greater detail; (2) checks on hand and cash on hand need to be documented in greater detail (ex.: location of cash on hand); (3) more documentation should be made at the end of the month as to that month's receipts/disbursements; and (4) the possibility of keeping a ledger. Steve had one question, concerning a \$28.00 bank credit which was not documented clearly. Allen Mattis—N5AFV, stated that this credit was for two services charges that were wrongfully assessed. The question concerning putting the club's money into some type of interest-bearing account was again raised. George Jolly—ND5E, was asked what he thought concerning this matter. After some discussion, Pete Norris—KJ5SS, will contact Randy Pollard—AK5G, who is a CPA, and ask him about the tax consequences to the club of earning interest on the club's money. There being no further discussion, the audit report was approved with a motion that passed unanimously. Recording Secretary, Jackie Burton—KC5OHJ, presented the February minutes. The minutes were approved with a motion that passed unanimously. Treasurer, Pete Norris—KJ5SS, presented the Treasurer's report dated February 29, 1996, showing a balance of \$5,257.97. Pete stated that B-VARC currently has a total of 7 life members and 106 regular members. The treasurer's report was approved with a motion that passed unanimously. Corresponding Secretary, Jim Cahanin—KB5TBZ, stated that he had received several complaints that members were not receiving their newsletters, even though they had paid their dues. Jim stated that he would send a letter of apology to each of these members. He further stated that a web page on the Internet has been set up for B-VARC through his Internet provider, on a temporary basis. John Moore—KK5NU, stated that, subject to the approval of the board of directors of both B-VARC and Hal-PC, Hal-PC is willing to offer us 10MB of disk space and an e-mail address for B-VARC to have a web page on the Internet, at a cost of \$75.00 per year. He stated that if B-VARC wished to register its name on the Internic, the cost would be \$150.00 for 2 years. After much discussion, a motion to approve the

expenditure of \$75.00 for a web page for B-VARC was made and passed unanimously. An amendment to the motion was made by Pete Norris—KJ5SS, to appoint a committee to maintain the web site for B-VARC. The Web Committee will consist of John Moore—KK5NU, Jim Cahanin—KB5TBZ, and Jackie Burton—KC5OHJ. Louis House—KD5GM, reported that the B-VARC Code Practice Net was going well. The net currently runs 3 nights per week, with 13 accumulated check-ins for January. Louis stated that when the code class starts in March, there will be no Code Practice Net on Monday nights throughout the duration of the course. Vice-President, Louis House—KD5GM, stated that the ham radio presentation for the Tatanka Boy Scout Festival is just about complete. He wished to thank everyone who has volunteered to help with this event. He further stated that Rick Hiller—KF5NU, has already put the antenna on the roof for this event. The question regarding liability insurance for this event was again raised. Louis stated that when he talked with Pat O'Malley, he was supposed to supply us with a copy of their insurance, as well as B-VARC supplying them with a copy of our insurance. This had not yet been done, but Louis stated that Mr. O'Malley indicated that we would be covered under the insurance; however, in the event it does become necessary, B-VARC does have liability insurance to cover this event. Vice-President, Louis House—KD5GM, presented a document from the ARRL concerning the purchase of ARRL materials at a discounted rate. For a \$30.00 registration fee, B-VARC could receive a package valued at over \$100.00 containing one of each of the publications available to us at this discounted rate, as well as the ability to purchase these materials for a period of one year at the discounted rates listed on the brochure. This issue was tabled pending further discussion. Treasurer, Pete Norris—KJ5SS, stated that he is willing to put together a preliminary syllabus for the Novice/Technician theory classes that B-VARC wishes to hold. He also stated that he will contact Vincent concerning the use of Strake Jesuit's facilities for these classes. Vice-President, Louis House—KD5GM, stated that the code classes would begin on March 11, 1996, and would run about 9 weeks. During this time, the Code Practice Net will only be held on Wednesday and Friday evenings at 8:30 p.m. Board Member, Terry McCoy—KK5RL, had been asked by President Grimes to look into a meeting place for B-VARC for 1997. Terry indicated that he had spoken with someone at Missouri City concerning the use of the Civic Center Complex. After some discussion, it was decided that we needed a bigger place than they had to offer to hold our meetings. Terry stated that he will continue to look for a place. Allen Mattis—N5AFV, stated that he had been contacted by Bill Smith, who is the assistant race director for the 25K and a co-director of the 5K race, concerning an event coming up on March 30, 1996. He stated that he had turned this over to Public Service Event Coordinator, James Belk—KC5ODL, but that we needed 6 to 8 volunteers for this

event. Anyone wishing to work this event should contact Bill Smith at 682-1206. Allen stated that Harold Parker—ND5F had made arrangements to have the names changed on the business cards for the club and was having them re-printed. George Jolly—ND5E, stated that in conjunction with the recent by-law amendments, he still had the by-laws on his computer and would be happy to make the changes and reprint the by-laws. He also stated that he needed the club's new Employer Identification Number for his paperwork. B-VARC Rag Chew Net Manager, Sam Wilson—N5CPA, reported that the net is doing well, and that the check-ins for the month of February were 15, 15, 17 and 16. Public Service Net Manager, Jackie Burton—KC5OHJ, reported that the Monday night Brazos Valley Public Service Information Net was going well, with check-ins ranging in the 40s consistently for the month of February. She also stated that on March 4, 1996, the check-ins were at a high of 68. President, Ron Grimes—WASSCE, had several questions/issues regarding the newsletter. He asked newsletter editor, Jackie Burton—KC5OHJ, if she would be willing to put a short summary calendar of events on the first page of the newsletter. Jackie stated that she would be willing to do this, starting with the next issue. He also stated that there needed to be some sort of extension for people to receive their newsletter after the end of the year/membership expiration and that their names should be carried on the roster for a couple of months, possibly 60 days, to give everything time to catch up. Board Member, Bud King—N5UOG, stated that we needed to get the Public Service Event Coordinator to get more involved with handling the events for B-VARC. President, Ron Grimes—WASSCE, stated that he would contact James Belk—KC5ODL, and talk to him. President, Ron Grimes—WASSCE, asked Sam Wilson—N5CPA, if he would like to be the club's parliamentarian. Sam declined the position. Board Member, Bud King—N5UOG, donated a copy of Robert's Rules of Order to B-VARC. President, Ron Grimes—WASSCE, stated that the Friday night dinner for the month of March would be at the Macaroni Grill on Westheimer on March 15, 1996. He also stated that at the regular meeting for March 1996, we would have something new. We are going to have a "New Ham Corner" specifically for new hams to receive information and to ask questions. This would be held about 15 minutes prior to the start of the regular meeting, and Ron would like people to volunteer to help with this new project. There being no further business, the meeting was adjourned by Ron Grimes—WASSCE, at 9:08 p.m. with a motion, second and unanimous vote.

MEMBERSHIP REPORT

by Pete Norris—KJ5SS

As of February 29, 1996, the current membership for the club is:

106

This number includes 7 life members.

OUT OF THIS WORLD HAM RADIO ACTIVITY

by Bruce Paige—KK5DO

Segment: Working the Russian Sputniks

There are currently 2 Russian satellites in orbit—RS 10/11 and RS 12/13. RS 15 is due to launch December 25-27. The RS 10/11 is really two packages mounted on the same satellite, as is RS 12/13.

The nice thing about RS-10 is that you uplink on 2m sideband and you listen on 10m, which means that most Techs with HF privileges already have the necessary equipment. RS-10 is in Mode A. Since you are receiving on 10m, you only have to worry about your transmit antenna pointing at the satellite. A beam with elevation and azimuth rotors is ideal. However, there are several people here in Houston that are working RS 10/11 from their apartment. Both antennas are in the apartment, not outside. They use a long wire to receive the 10m and a vertical to transmit. They normally can work it from horizon to about 45°, and then on the down side from 45° to horizon. If you have a beam, you should be able to work it most of the pass.

So how do we do it? First, tune from the top to the bottom on the 10m band, 29.360 to 29.400, and listen to see if you hear anyone else. If not, try listening for the robot beacon on 29.403. If you do not hear anything, you

might have stale elements or the propagation is not right for your location to hear. Now, if you do hear someone, try to get tuned in so you can work this station. Try tuning to 29.380 and set your transmit to 145.880. Start transmitting 1-2-3 and your call sign. As you transmit, turn your receiver up and down and see if you can find yourself. All of a sudden, you will hear your voice. You have just found your uplink and downlink pair of frequencies. Call CQ a few times.

It is best when working satellites to get into the habit of calling CQ and identifying the satellite. You should call "CQ OSCAR 13" or "CQ OSCAR" or, in the case of this satellite, "CQ RS10, CQ RS10." The reason for this is that you are transmitting on 2m. Now, just think what would happen if some unsuspecting sole happened to be scanning 2m sideband and finds you calling CQ and you are 20 over to him. Although this portion of 2m is set aside as the OSCAR subband, he may not know it. He now starts trying to return your CQ and gets really mad that you are ignoring him. The other reason is that 145.88 is the uplink to RS 10/11 but guess what, it also happens to be the downlink to AO-13 and AO-10. Now, we might have a major problem. Here you are listening on AO-13 and along comes someone calling CQ. You try to talk to him and you find out that this guy just won't talk to you. If he were calling "CQ RS-10" and you were on AO-13, you would know immediately that he could not hear you and you would then have to move to another part of the AO-13 band, because his power will make it impossible for you to hear anything.

Now, let's say someone comes back to your call. Great—start your QSO. But, as you talk, the satellite is moving, so you have to follow it with your antenna and you will also have to adjust your transmit frequency so that you stay with your uplink. You will also have to tweak because the person you are talking with might be lazy and not tweak his radio and he will shift up or down on you. This is truly the fun part, trying to work all the knobs, turn the antenna, and log the QSO while you are talking. After some practice and a few QSO's, it will be easy for you to tune up and talk.

The other Russian sputnik is RS-12. This one transmits on 29.41 through 29.45 and receives on 21.21 through 21.25 (note, this is in the Advanced and Extra portion of 15m). It is known as mode K. Advanced operators can work it from 21.225 through 21.25 and Extras can work the entire band.

We did not mention RS-11 and RS-13. These are riding piggy back on the same satellite as RS-10 and RS-12, but are presently turned off. Don't forget the newest RS satellite, RS-15. Basically the same operating procedure as for RS-10, but has a higher altitude which gives a 30 minute pass and covers parts of Europe when over the U.S.

THE INTERNET

by Jackie Burton—KC5OHJ

The following article is the seventh in a series of articles John Moore—KK5NU, has written for publication in the B-VARC Bulletin.

The Editor

All You Want to Know About the Internet and More

by John W. Moore—KK5NU

Having Made the Connection On My Own, Now ????

Since you have successfully made your connection, real time and live, now on to the internet (you are of course by now a successful "net surfer," aren't you?), we will assume that the first stop that you will want to make is one of the online callsign servers. You just have to check out your own call and make sure that the FCC does have you correctly in the database. So you will try and make the connection to one of the following: (Bear in mind that at the time of this writing, they do or did exist - no guarantees that they'll be there forever, though)

- <http://www.uar.edu/doc/hamualr/callsign.html>
- <http://www.qrz.com/cgi-bin/webcall>
- <http://www.mit.edu:8001/callsign>

The callsign server online and maintained at the University of Arkansas at Little Rock (uar.edu) by Steve Buhr—KC5NXX, is updated on a daily basis from the master database maintained by the FCC in Washington, DC - the address is:

http://www.fcc.gov/XFS_AlphaTest/amateur/index.html

This is run at 1200 hours EST on Monday for the master database and each day of the week, including Saturday and Sundays, provisions are made for the daily transaction files to be processed. Equipped with this URL address you'll never be more than 24 hours out of date.

The prime advantage of the callserver maintained at qrz.com is that they provide you with the opportunity to enter the database and give your own distinctive e-mail address that is associated with your amateur callsign. This then becomes accessible online from anywhere in the world, and they claim that they will make it become a part of the quarterly update of the CDROM that they offer for sale. Your next visit should be to the B-VARC homepage site, now found at the URL of:

<http://www.hal-pc.org/~bvarc/bvarc.htm>

Please note that this is a very new address as of this writing. Browse the information that has been compiled and placed online by a few of the members of the club. Check out the local examination schedules, net times and frequencies and see if any of the links that are shown are of any interest to you. Be advised that you should of course check back often as the material is subject to being updated regularly. Who knows, you may find the current edition of the B-VARC Bulletin online, too.

More to come...

John Moore—KK5NU

VE EXAM RESULTS MARCH 1996

by Harold Parker—ND5F

B-VARC again sponsored and administered the ARRL's Amateur Radio Examinations that were held on Tuesday evening, March 12, 1996 at Strake Jesuit College Preparatory in Houston.

The VE Team consisted of:

Louis House - KD5GM
Harold Parker - ND5F
Joe Tarrant - K5DIY

The Assistants were:

Cass Germany - KG5IT
Don Schexnailder - AB5IV

A total of 17 exams were administered during the evening to 10 applicants. The overall "pass rate" for the evening was 47%.

Congratulations to all the following who passed exams:

Sajid Biaooh - Element 2
Raymond Barron—KC5TWN - Element 3B
Stephen Hunt - Element 2
Steve Gottlieb—WA5OEN - Element 1C
James Martin - Element 2
Gene Russell—N5SGT - Element 3B
James Tichnor—KC5SJT - Element 4A
Tony Williams—NC5SNT - Element 3B

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 Vincent—WA5ETS, and everyone at Strake Jesuit College Preparatory for making these excellent classroom facilities available to us for our exams each month.

73, Harold Parker—ND5F

THE WORLD OF TEN TEN INTERNATIONAL

by Al Mattis—N5AFV

Members of Ten Ten International are looking forward to a number of upcoming events. A large Ten Ten gathering is planned for the Dayton Hamvention, May 17-19, 1996. Many paper chasers attend this annual event. On May 19, 1996, Jack Moore—K4NF will host the annual Texas Hill Country Gathering in New Braunfels, Texas. Houston area Ten Ten members should consider attending this annual picnic which usually draws 35 to 50 persons. The 1996 Reno Paper Chasers Bash will be held August 15-18, 1996, at the Circus-Circus Hotel in Reno, Nevada.

The S.H.O.T. chapter is pleased to welcome Bill Moody—KC5EUS and Ken Schaefer—WX5I as our newest local members. A number of local members have begun to work on the various S.H.O.T. chapter upgrades. A list of the local members of the chapter and their upgrades and point value is available, and may be obtained by sending the certificate manager, N5AFV, a self-addressed, stamped envelope.

Paper chasers continue to be active on 28.345 MHz when the band is open. Chapters with specials this month include Branding Iron (TX) and Kansas Trails (MN). There has been a movement to change the unofficial paper chaser frequency from 28.345 MHz to 28.375 MHz. The change has been proposed because of computer harmonics falling on 28.345 MHz. Many operators who use computers in their shack have found it difficult to use 28.345 MHz when their computer is on. The change in frequency was to occur on March 1, 1996, but many paper chasers continue to use the old frequency.

Sad news has been received about the loss of a number of paper chasers this past month. John O'Neill—KA1LEV in New Hampshire became a silent key in late February. O'Neill had been the chapter head and founder of the White Mountain chapter in New Hampshire. Larry Silverstein—WB2COL passed away in early March. Silverstein was the chapter head and certificate manager of the Brooklyn Bridge chapter in New York. Word has also been received of the death of Aubrey Armstrong—K5MOF in San Antonio. Armstrong was an active member of the South Texas Light Horse Brigade chapter.

Because we are currently in the low portion of the solar cycle, propagation on the ten meter band continues to be poor. Domestic band openings still occur, but are usually of short duration. Occasional DX can be worked at times, particularly Latin American stations. A number of contacts with Australia and New Zealand have also been reported. Summer E-layer propagation, which does not require a high sunspot number, should begin in the next couple of months.

Remember, the Houston S.H.O.T. net meets every Tuesday evening at 8 p.m. local time on 28.488MHz. All amateurs are welcome to check in, even if they do not have a Ten Ten

number. If you are not a member of Ten Ten International and wish to join the organization, please check into the net. There are a lot of exciting activities in Ten Ten, and many friendly people can be found on the 10m band.

B-VARC RAG CHEW NET CHECK-INS

by Sam Wilson—N5CPA

The B-VARC Rag Chew Net is held on Wednesdays at 8:00 p.m. on 3.960MHz, +/- 3kHz. The following check-ins were reported for the month of February:

February 7, 1996

N5CPA (NCS), W5PDW, WD5CJL, WB8SVR, WB8SVR, WB8SVR, N5ECP, W5GHK, W5GLD, W5IHY, KG5KV, KK5DO, WA5TWL, WA5OEN, KK5RL.

February 14, 1996

N5CPA (NCS), KB5ION, WB8SVR, WB8SVR, WD5CJL, KF5NU, KK5RL, KG5KV, W5EFB, N5RSJ, W5IHY, W5GHK, KE5HP, WN5A, WA5DZY.

February 21, 1996

KG5KV (NCS), WD5CJL, KD5GM, KC5NMR, KJ5SC, KB5PAJ, J5AFV, N5OAC, KK5DO, K5HFY, W5EFB, N5CPA, W5IHY, N4SKR, KC4TLG, WB4LJU, N6CJR.

February 28, 1996

KG5KV (NCS), KF5NU, KK5DO, W5EFB, N4SKR, N5AFV, KJ5SC, KB5PAJ, N5CPA, KC5NMR, KJ5SS, W5IHY, KC5HJ, WN5A, WD5CJL, WB8SVR.

PSN CHECK-INS

by Jackie Burton—KC5OHJ

The Brazos Valley Amateur Radio Club Public Service Information Net had the following check-ins for the month of February, 1996. Only the count is listed, as there is not enough room to list individual call signs:

February 5, 1996: 32
February 12, 1996: 45
February 19, 1996: 46
February 26, 1996: 41

UPCOMING SWAFFESTS . . .

None reported.

SCANNER JACK'S CORNER

by Jack Roberts—KB5TMY

Frequencies for the State of Texas:

154.680 Car to Dispatch-Houston
 155.460 Dispatch to Car KKC-588
 154.950 Car to Car
 155.370 Intercity
 155.505 Texas Rangers
 154.695 Car to Disp. Pierce
 155.445 Disp. to car KUZ-831
 155.535 Pierce DPS
 159.090 Texas Rangers
 154.665 DPS Dispatch
 154.920 Texas Rangers
 154.665 DPS Dispatch
 154.920 Texas Rangers
 154.935 Texas Rangers
 159.210 Houston and Texas City DPS
 158.730
 155.475 Texas Rangers
 154.905 Texas Rangers
 159.150 Texas Rangers
 451.200 Texas Rangers
 456.200 Texas Rangers
 453.550 Texas Rangers

Game Wardens:

151.265
 151.415
 159.270
 159.360 Fire Fighting
 159.405
 159.420

NOVICE/TECHNICIAN
CLASSES ANNOUNCED

by Pete Norris—KJ5SS

The Brazos Valley Amateur Radio Club will hold its Novice/Technician theory classes beginning on May 13, 1996, and lasting through July 8, 1996, for testing on July 9, 1996.

The classes will be held at the First Colony church of Christ in room 121 from 7:00 p.m. to 9:00 p.m. each Monday evening.

For further information, please contact Pete Norris—KJ5SS at (713) 342-9089.

SCHEDULE OF WEEKLY NETS

Monday
 7:30 p.m. 34.94 Swap Net
 146.94MHz
 8:00 p.m. Ft. Bend Cty EM Net
 145.49MHz
 8:30 p.m. B-VARC Code Practice Net
 146.47MHz (receive only)
 9:00 p.m. B-VARC
 145.47MHz
Tuesday
 8:00 p.m. Ten Ten SHOT Net
 28.488MHz
Wednesday
 8:00 p.m. B-VARC Rag Chew
 3.960MHz (+/- 3kHz)
 8:30 p.m. B-VARC Code Practice Net
 146.47MHz (receive only)
Friday
 8:30 p.m. B-VARC Code Practice Net
 146.47MHz (receive only)
Saturday
 9:00 a.m. Houston Emer. Mgmt. Net
 146.84MHz (Sky
 Warn/RACES)
Sunday
 7:30 p.m. ARES Net
 147.30MHz
 10:00 p.m. AMSAT Net
 147.10MHz
2nd & 4th Sundays
 1:30 p.m. TX State RACES Net
 7.248MHz

B-VARC CODE PRACTICE NET

by Louis House—KD5GM

The Brazos Valley Amateur Radio Club sponsors a Morse Code Practice Net, called BCN, on Monday, Wednesday and Friday nights at 8:30 p.m. CST. The purpose of this net is to offer a consistent code practice schedule for all amateurs who are working on their upgrades. The text is sent at approximately 5, 8, 10, 13 and 20 wpm. The signal type is MCW on the 2m frequency and CW on the 10m frequency. The source of the text is announced in CW before the text is sent. The length of the net is usually 25 to 30 minutes. Check-ins are welcomed at the start of the net (on 10m, check-ins are taken from 8:15 to 8:30 p.m.). Tune in on 146.47MHz simplex or on 28.146.47MHz CW, with a desire to increase your code proficiency and have a good time. Reminder: BCN will not have a Monday night session during the B-VARC Code Class, which begins on March 11 and lasts for 9 weeks.

The net roster for the month of February lists a total of 16 stations checking in. These are: KB5WZI, K5HFY, N5UOG, K5SRL, K55HNJ, W5A, K5KGG, K5EUS, K5VTB, W5DRB, K5JRL, K5SDO, K5QZD, K55JU, K5RGK, and KD5GM/NCS.

Have fun and...73 de KD5GM/NCS AR SK

TATANKA DISTRICT BOY
SCOUT FESTIVAL

by Louis House—KD5GM

On March 9, 1996, the Brazos Valley Amateur Radio Club manned an amateur radio station, operating under the club's call sign—KC5OIG, to display and demonstrate amateur radio for the Tatanka District Boy Scout Festival. The event was held at the West Oaks Mall.

B-VARC was successful in its ability to demonstrate amateur radio to the scouts and their parents. On the air contacts generated much interest for the youngsters, who both listened and talked to other hams in the U.S. and in some foreign countries. The operators of KC5OIG did an excellent job, both operational and educational.

Educational literature, provided by the ARRL, was handed out to many visitors to our station, along with B-VARC contact information for those parents who were interested in exposing their child to amateur radio.

Mr. Pat O'Malley of the Boy Scouts of America Tatanka District, gave his personal thanks to B-VARC for having such a nice display at the Festival.

Each and every job is very important when putting up a manned radio station for an event such as this one. I wish to express my thanks to each of you who donated equipment, time, work and knowledge to make this event a special one. You are: Ron Grimes—W5SCE, Steve Gottlieb—W5OEN, Rick Hiller—K5FNU and family, Jack VanDemark—W5NSA and Adam, Donn Washburn—N5XWB, Lanny Poteer—K5VTB, Bruce Paige—K5SDO, George Jolly—ND5E, Robert Moore—K5SUO, Dale Temple—K55HNJ, Bud King—N5UOG, Bill Moody—K5EUS, Harold Parker—ND5F and Mrs. Parker, Gerry Moore—K04QX, John Moore—K5SNU, Mike Hartman—K5EJU, Darrell Kirk—K5JAR and Anita, Joe Sam—K55JU, Rick Covert—W5DL, Fran Nussbaum—K5JRL, David Litchford—N5VXU and Claude Sessions—K5HFY.

Thank you for a great job!

73 de KD5GM

PUBLIC SERVICE EVENTS

by Mike Hardwick—N5VCX

Volunteers needed for the following:

MS-150

April 20-21, 1996

Contact: Bret Prichard—N5VOY at 654-5400

Clean Air Challenge Bike Ride

May 12, 1996

Contact: Mike Hardwick—N5VCX at 984-8885 (wk) or 771-4625 (hm)

PROFILES

Jim Cahalan—KB5TBZ

I have been licensed a little over 3 years now, but it took me over 20 years to get there. What a learning curve!

When I got interested in amateur radio, there were no programs like Super Morse or Morse Academy. Come to think about it, there weren't even PCs then. I attempted to learn code from a mechanical device called an Instructograph. This machine looked like a tall tape recorder and played small rolls of paper tape with holes punched in it. Neat concept for some, not worth a darn for me. I rented the machine for 2 months and was never able to get my confidence or speed up enough to go to the FCC field office to take the test.

I lived without it for many years until an old high school buddy, whom I hadn't heard from in about 15 years, called me one day. He told me since I had introduced him to ham radio all those years ago, he had since gotten his license and was wondering if I had ever gotten mine. He informed me of the new no-code ticket. I passed the no code test shortly thereafter.

I then discovered a program called Super Morse and downloaded it from a bulletin board. I learned about the Farnsworth method of studying code and forged ahead.

To make a long story short, here I am—licensed and active in amateur radio, another lifelong dream fulfilled.

RFI, EMI AND OTHER STUFF

by Pete Norris—KJ5SS

The stuff of electronics is the stuff of fascination, speculation, entertainment and industry, touching every aspect of life. Although apparently magical, defying understanding, the basics are available to all if approached from the position the reader has no previous experience in electricity or electronics. With only a little knowledge, certainly no more than offered to junior high schoolers during the last 50 or so years, it is possible to have a comfortable feeling when reading the theory for our various exam sections or technical discussions in the hobby publications. So if you feel you just don't get it, hang on for a ride that may just carry you out of the fog and even fling you through the ionosphere!

Basic Basics:

To start with, physical quantities and units must be established. Think about the underlined words. As an example, in the express $I=IA$, I is the symbol for a physical quantity and A is the symbol for a unit for that quantity. The magnitude of the quantity is 1. Again, think about it.

There are 2 subsets of physical quantities: fundamental and derived (sometimes called "compound"). The derived quantities are all based on, or derived from, the fundamental or basic quantities. In addition to this good news, there are, for our purposes, only 4 basic quantities. These are: length, mass, time and charge. The first 3 quantities are used for mechanical systems, while charge must be added to talk about electrical and magnetic subjects.

If there is any bad news, it is there are, for our purposes, 2 systems of units used: English and metric. These are best shown in tabular form as in the table below. Notice there are the larger MKS and the smaller CGS units shown:

[See table, page 9]

And there you have it! Notice Time and Charge use the same units through all systems of units and that the remaining metric systems are quite similar. But more about this little table next time. Save this issue or commit the table to memory, whichever is easiest.

Next time: "Slug" and other things explained.

B-VARC LADIES BRUNCH

The B-VARC Ladies Brunch will be held again on the first Saturday in April (April 6th). For more information, please contact Sandra Gottlieb—KC5IWL, at gotsan@tenet.edu.



REMINDER . . .

The deadline for articles to be placed in the B-VARC Bulletin is the 15th of each month. Please make every effort to have your article(s) to me by that date. If you know that you will not be able to meet the deadline but are planning to contribute to the newsletter for that month, you may call me to make special arrangements. Otherwise, if I do not have your article(s) by the deadline, it/they will not be published in that issue. Thank you for your cooperation.

—The Editor

CITY ELECTRONIC SUPPLY

Alex-WASUHT

Store Hours: Mon.-Fri. 9:00-5:00
 7015 Atwell Houston, Texas 77081 Ph: 663-6066 Fax: 663-6413



ODO ANTENNAS - 2 METERS
 BMB ANTENNAS - 440 MHz

Specializing in Communication Antennas

JIM CORBIN • KA5ODO
 CHARLIE CAVIN • N58MB

713-864-6368
 1839 Watercrest Houston, Tx. 77008

HOUSTON AMATEUR RADIO SUPPLY, INC.

GEORGE DiLETTA, K0ORW
 PRESIDENT

181 CYPRESSWOOD DRIVE
 SPRING, TX 77388

800 471 7373
 713 355 7373
 Fax 713 355 8007

PAIGE COMPUTERS, INC.

Largest EPSON® Service Center in Texas



7825 Boone Road
 Houston, Texas 77072

BRUCE A. PAIGE

713-833-8386
 Ext. 201
 FAX • 713-833-3544



Kronberg's Flags and Flagpoles

7106 Mapleridge • Houston, Texas 77081 • (713) 666-2371

Lou Kronberg
 Chairman of the Board



3753-B Fondren
 Houston, TX 77063
 (713) 784-0140
 Fax (713) 784-9740

Membership Application

New Renewal Roster Update Only

Bring to a Club meeting, or mail with check to:
 B-VARC, P.O. Box 1630, Missouri City, TX 77459

Regular membership dues are \$16.00/year. Life Memberships are \$160/person. Additional family members may join B-VARC for only \$2.00/year each with no additional copy of the newsletter.

Name _____ Callsign _____ License Class _____

Home Phone _____ Work Phone _____ ARRL MEMBER? _____

Mailing Address _____

E-Mail Address _____

Remittance:

Regular Membership _____	+ Family Membership _____	=	Amount _____
B-VARC Life Memberships at \$160/person	Qty _____		Amount _____
ARRL Memberships (\$31.00/year)	Qty _____		Amount _____
Worldradio Subscription (\$15.00/year)	Qty _____		Amount _____
			TOTAL _____

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

Signature _____ Date _____

ANTENNA COLUMN

by Rick Hiller—KFSNU

40 Meter DX'ing with a Delta Loop

Low bands are in vogue these days with the sun spot cycle at or near its minimum. Try moving your operating frequencies down to 40m and below and your operating hours into the evening and throughout the night and you will be treated to some good stateside and DX signals. These long wavelength bands 40, 80 and 160 require alternative antenna configurations in order to produce low angle DX signals. This article examines one such antenna and although the article is written to address 40m, the antenna can be scaled down to 80 and 160, if you have the real estate.

A triangular full wave loop or "Delta Loop" that is vertically oriented and fed for vertical polarization will generate low angle radiation and hence give a good account of itself in working DX. The delta loop provides all of the benefits of the fullwave loop and is supported only by a single tall support point. This single support can be simply a Radio Shack push up pole (Fig. 1 a), the trunk of a tree or it can be a yardarm mounted pulley near the top of a tower (Fig. 1 b). A full-size 40m delta loop will have a vertical height of about 40 feet, so be sure to make your vertical support point high enough to place the bottom side of the triangle at a safe distance above the ground.

The Delta loop, deployed as an equilateral triangle (all sides equal length) is the preferred deployment preference but this is most probably determined by the height of the available vertical support point. Feeding the loop 1/4 wavelength down from the apex provides omnidirectional performance. However, by moving the feed point to one of the bottom corners, it has been shown to provide a slight increase in gain. Also, the corner feed provides a much easier feed point access.

The Full Wavelength Apex Up Corner Fed Delta Loop

A 1 wavelength long delta loop is easy to build and provides a broadbanded gain antenna in the space similar to that required by a dipole.

Reference Fig. 2. Construction starts with calculating wire length. Also, since the loop has a nominal feed impedance of 112 ohms, a 75 ohm series section coaxial transformer can be placed in line at the feed point to provide a nominal 50 ohm feed impedance for the exciter. The series section transformer coax value and length are also figured below. Alternatively the loop can be corner fed with open wire line through a tuner. This configuration will provide multi-banded operation. My 40m loop loads up well on 80m also.

Calculations:

$$(1) \text{ Wire length (feet)} = \frac{1005}{\text{Frequency in MHz}}$$

$$\text{ie. } \frac{1005}{7.15\text{MHz}} = 140.56 \text{ Feet for mid-band}$$

(2) Value of series section transformer coax

$$= \sqrt{Z_{in} \times Z_{out}}$$

$$\text{ie. } \sqrt{50 \times 112} = 75 \quad \therefore 75 \text{ ohm coax can be used for the series section transformer}$$

$$(3) \text{ Transformer length(feet)} = \frac{1005 \times \text{VF}(\text{coax velocity factor})}{4 \times \text{Frequency in MHz.}}$$

$$\text{ie. } 75 \text{ ohm coax with } .66 \text{ VF}$$

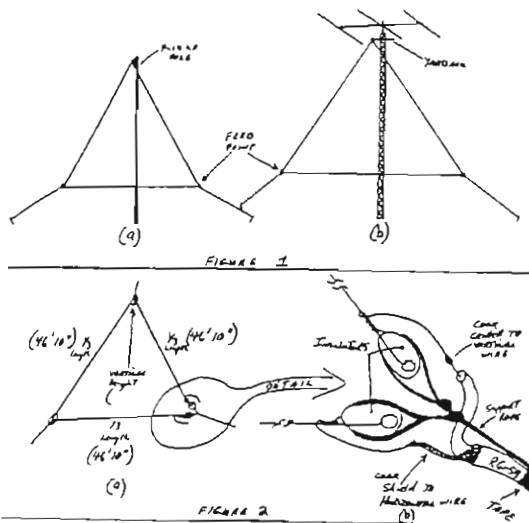
$$\frac{1005 \times .66}{4 \times 7.150} = 23.19'$$

Bill of materials for the full size delta loop:

- Wire—length figured above
- 4 insulators (apex, corner and 2 at the feedpoint)
- Apex and bottom corner support ropes
- 75 ohm coax—length figured above
- 50 ohm (nominal) coax—any convenient length.
- Silicon based caulk
- Electrical tape

Construction Steps:

1. Draw your antenna configuration on a piece of paper so that you know the dimensions to measure as in figure 2.
2. Measure then cut the length of wire for the antenna itself based on the length of wire in the formula plus about 1 foot for mechanical connection use.
3. Layout the wire on the ground. It does not have to be in a triangle, it just needs to be laid out so that you can measure the individual sections.
4. Fix the insulators at the corner and apex points.
5. Connect the apex support rope and the corner support ropes to the insulators (Fig. 2 a).
6. Feed point mechanics (Fig. 2b). Strip back 3 inches of cover from both ends of the 75 ohm coax series section transformer. Separate the braid from the center and then connect one end to the feedpoint. The center wire of the coax is soldered to the wire going to the apex and the coaxial braid to the horizontal wire. Seal these connections with silicone clear caulk or "Goop" available at Home Depot. Tape the series section transformer coax to the support rope at about 1 foot intervals for 3 to 4 feet
7. At the other end of the series section transformer solder the center and braid to the similarly separated center and braid wires of the 50 ohm coax feedline. After soldering, seal these connections with the silicone caulk and then tape over the complete connection with electrical tape.
8. The loop is now ready to deploy. If you are using a pulley at the top of a pole or tree it is easy to just pull the loop up. If you must climb a tree to fasten the apex to the tree be very careful.
9. After fastening the apex at the correct height stretch out the corner support ropes and fasten them to their tie points. Place the appropriate connector on the end of the 50 ohm coax and connect to your transceiver. Run an initial SWR curve. I'm sure you will be pleased with the broadbandedness of the loop.



Have fun working all of the new DX. I do hope the propagation improves as it has been pretty lousy lately. For European stations check 40m from about 10 p.m. till 2 a.m. and for Pacific stations, check very early in the mornings—4 a.m. through sunrise.

Next month see “A Shortened 40 Meter Delta Loop.” This will show how to keep full size loop performance with a 75% full size loop.

Quantity	Unit		
	English	MKS	CGS
Length (L)	foot (ft)	meter (m)	centimeter (cm)
Mass (M)	slug	kilogram (kg)	gram (g)
Time (T)	second (s)	second(s)	second(s)
Charge (Q)	Coulomb (C) ⁽¹⁾	Coulomb (C)	Coulomb (C)

⁽¹⁾ named after Charles A. Coulomb (1736-1806), a French physicist.

B-VARC CALENDAR OF EVENTS FOR APRIL 1996

- | | | | |
|-----|----------------------------------|---------|--|
| 4th | 7:30 p.m. - B-VARC Board Meeting | 11th | 7:30 p.m. - B-VARC Regular Meeting |
| 6th | Ladies' Brunch - (location TBA) | 19th | 6:30 p.m. - Friday Night dinner (location TBA) |
| 9th | VE Testing Session | 20-21st | MS-150 Bike Ride to Austin |



the B-VARC BULLETIN

The Monthly Publication of the
BRAZOS VALLEY AMATEUR RADIO CLUB
Serving the Greater Houston Area
(Club Call Sign—KC5OIG)

Editor-in-Chief: Jackie Burton—KC5OHJ (713) 460-1968
e-mail: jburton@nol.net or CompuServe—71573,471

The Brazos Valley Amateur Radio Club (B-VARC) was originally organized in 1978, primarily as an emergency communications group available to assist the communities of Missouri City and Stafford, when required. Since that time, B-VARC has grown and expanded its activities to become the most active HAM radio club in the southwest Houston area.

Today, B-VARC is truly a general-interest club with an impressive record of Public Service. The commitment to service has been recognized by the Amateur Radio Relay League (ARRL) with the coveted status of Special Service Club. We are proud of our members who represent 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 held at 7:30 p.m. on the second Thursday of each month, at the Sugar Land Community Center. Talk-in assistance is available on the 145.47, 444.55 and 442.5 MHz repeaters.

To obtain information about the club, its activities, or about joining B-VARC, contact Betty Wilcox—KA0TEN, at (713) 859-6512

B-VARC MEETING SCHEDULE		B-VARC EATING SCHEDULE
Thursday, April 4th 7:30 p.m. Open to <u>All</u> B-VARC Members	Board of Directors Meeting Sugar Land Community Center	Saturdays—7:00 a.m. to 9:00 a.m. Location: New York Coffee Shop, 9720 Hillcroft @ S. Braeswood
Thursday, April 11th 7:30 p.m. Program: Operational and RF Considerations for Field Day by Rick Hiller—KF5NU	B-VARC Regular Meeting Sugar Land Community Center	3rd Friday Dinners—6:30 p.m. SHARP! Locations announced each month

Volume 19 Issue 4

April 1996

BRAZOS VALLEY AMATEUR RADIO CLUB
PO BOX 1630
MISSOURI CITY TX 77459-1630

ADDRESS CORRECTION REQUESTED



FIRST CLASS POSTAGE

Bud King N5UOG
814 Bel Mar
Sugar Land, TX.
77478

Jan 97