

the B-VARC BULLETIN

The Monthly Publication of The Brazos Valley Amateur Radio Club

Volume 19 Issue 9

September 1996



President:

Ron Grimes—WA5SCE
(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—N5UOG
(713) 494-3741

1-Year Board Member:

Claude Sessions—K5HFY
(713) 242-6069

Past President:

Carl Cunert—WB8SVR
Allen Mattis—N5AFV (appointed)

NOTES FROM THE PRESIDENT

by Ron Grimes—WA5SCE

I hope everyone has had a pleasant summer. All the teachers have gone back to work by now and the kids have started a new school year. Drive time on the MERA repeater will be having a few familiar voices return on the morning and evening commutes. Welcome back! Now, the fact that the teachers are returning to the air, and what follows in this column, are NOT related events.

This month, some help for my column showed up in e-mail. It reminded me of Randy Pollard's—AK5G, repeater program presented at a B-VARC meeting earlier this year. At the end of the meeting, Randy asked everyone to air some of their pet peeves about repeater usage. I thought some of you might feel empathy with the author. Read it in good spirits, and if you see yourself, well...

1. Before you get too far into that 3 min. monologue, pause for a second to see how many people are doubling with you. Fewer than 4? Continue transmitting.
2. The courtesy beep is there for a purpose—wait for it before you transmit. If you wait, you won't double with the guy who paused to see how many people were doubling with him.
3. It's not necessary to say "over" at the end of each transmission, particularly when the repeater has a courtesy beep. Right? Over.
4. Phonetics? We'll assume you know them since there was a question about it on your exam. FM, and particularly FM repeaters, are strong signal modes. You shouldn't need to spell things out, and if you do on rare occasions, simply spell the word. Say: You didn't get my name? I'll spell it: A-R-N-O-L-D
Not: You didn't get my name? I'll spell it. Alpha Romeo November Oscar Lima Delta.
Oscar Kilo?
5. We should strive for efficiency in communications during public service events and scheduled nets. Both serve as practice for real emergencies. Keep transmissions short and concise: think about what you're going to say first. For the best in the business, try listening to air traffic controllers.

Police dispatchers are ok, but can't compare with the ATCs. Many lives depend on each ATC transmission being understood completely. (On the west side of town and a good antenna, try 123.8MHz).

6. Speaking of police work, why say "that's clear," when you really mean "10-4." Most of us aren't up on the latest police jargon.

I think I got caught on a few of those. Sorry. I'll try to do better. By the way, except for the November general meeting, all of our Board and general meeting dates are back on track through 1997. Thanks, Bud—N5UOG, for helping us secure the Sugar Land Community Center as a meeting place. And thanks to Terry—KK5RL, for finding out it's the best deal going!

73, Ron—WA5SCE

FROM THE EDITOR

by Jackie Burton—KC5OHJ

As most of you are probably aware by now, Donn Washburn—N5XWB has moved to Austin. For those of you who miss Donn as much as I do and want to stay in touch, here's his address and phone number:

4607 Sidereal Drive
Austin, TX 78727
(512) 837-7141

Donn was a great asset to B-VARC and we will all miss him very much.

The Editor

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 August 1, 1996. This was the eighth board meeting of the calendar year. The meeting was called to order by President, Ron Grimes—WA5SCE, at 7:30 p.m.

The following Board Members and guests were present: Ron Grimes—WA5SCE, Louis House—KD5GM, Jackie Burton—KC5OHJ, Jim Cahanin—KB5TBZ, Pete Norris—KJ5SS, Terry McCoy—KK5RL, Bud King—N5UOG, Claude Sessions—K5HFY, Allen Mattis—N5AFV, Sam Wilson—N5CPA, John Moore—KK5NU, Mike Hardwick—N5VCX, Carl Hacker—KB5LDY, Andy Stewart and Tom McBrayer.

Recording Secretary, Jackie Burton—KC5OHJ, presented the July minutes. Board Member, Terry McCoy—KK5RL, had one correction to the July minutes, that being the number of options for a meeting place for B-VARC. The correct number should be 4 instead of 2. The minutes, as amended, were approved with a motion that passed unanimously.

Past President, Allen Mattis—N5AFV, introduced two guests, Andy Stewart and Tom McBrayer, who are both Houston Marathon officials. They presented information concerning the upcoming 20K, 25K and 30K marathons, and thanked B-VARC for their participation in those events in the past, and encouraged our participation in the future. Andy Stewart stated that the B-VARC logo was on the brochures for the 30K. The 30K will now be held Sunday, December 8, 1996, at 6:30 a.m. The 20K will be held Sunday, October 20, 1996, at 7:00 a.m., and the 25K will be held on November 17, 1996, at 7:00 a.m. as well.

Corresponding Secretary, Jim Cahanin—KB5TBZ, reported that the B-VARC web page was still up and running, with better than 700 hits so far.

Vice-President, Louis House—KD5GM, asked for someone to volunteer to take over the code classes which will be held from Sept/Oct. through Feb./Mar.

Board Member, Terry McCoy—KK5RL, stated that he had discontinued his search for a meeting place for B-VARC since it was decided that B-VARC would continue to meet at the Sugar Land Community Center.

Board Member, Bud King—N5UOG, had nothing to report.

President, Ron Grimes—WA5SCE, gave 2 letters to board member, Claude Sessions—K5HFY, one to KHTV requesting the use of their duplicating facilities for the copying of our newsletter, and one to the elders of the First Colony church of Christ for the use of their classroom facilities for our code/theory classes. He asked Claude to look over the letters and make any needed corrections, additions, etc. Claude stated that he felt there would be no problem with the continued use of KHTV for our copying of the newsletter, and if a problem ever arose, he had another alternative.

Past President, Allen Mattis—N5AFV, had nothing to report.

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 July ranged from 9 to 17.

Public Service Net Manager, Jackie Burton—KC5OHJ, reported that the Monday night Brazos Valley Amateur Radio Club Public Service Information Net was going well, with fairly high check-ins. She also reported that the squirrel activity seemed to be at a minimum. Concerning the newsletter, Jackie stated that she had 2 people volunteer to help with the B-VARC calendar for the newsletter. She also requested a volunteer to keep up with the ARRL, etc. paperwork that is usually at the back table at the general meeting.

President, Ron Grimes—WA5SCE, stated that the August regular meeting would be held on Thursday, August 22, 1996. Also, the meeting date for the month of November will be different than the usual second Thursday. He stated that it was important that we have a quorum at the November meeting, which would be 25% of the members (approx. 38-40 members) in order for the elections to be held. Carl Hacker—KB5LDY, asked if a proxy was possible, and also if Jackie would start putting this information in the newsletter.

President Grimes stated that he had asked Scott Pederson—K15DR to replace James Belk—KC5ODL as public service events coordinator. Scott has agreed to accept the position.

President Grimes also stated that he had spoken with Randy Pollard—AK5G and Harold Parker—ND5F, concerning a

plaque for our lifetime members. This would be made available to any lifetime member of B-VARC, at the cost of the member. A motion was made, seconded and passed unanimously to approve the lifetime member plaque.

Carl Hacker—KB5LDY, stated that the 25K run is now called the Methodist Hospital System Marathon. He stated that Channel 2 was not going to be covering the marathon this year, and that if no other network picks it up, ATV will be the only coverage. He stated that the length of the marathon had been extended 1 hour.

Past President, Allen Mattis—N5AFV, stated that he thought B-VARC should give a public service events presentation/training session. He stated that it was his opinion that public service events needed to be stressed more as to their importance.

Carl Hacker—KB5LDY, stated that the Gulf Coast Ham Convention Inc. will be held on October 11, 12 and 13, 1996, with an auction on Friday night, October 11th.

Mike Hardwick—N5VCX, stated that there were 2 public service events that were scheduled for the weekend of October 12 and 13, 1996, those being the Alamo Challenge bike ride and the Houston Symphony Classic.

Allen Mattis—N5AFV, stated that the Ten Ten International QSO party scheduled for Friday and Saturday, August 2 and 3, 1996. This will be a phone contest on 28.488MHz, beginning at 7:00 p.m. and lasting for 48 hours.

Treasurer, Pete Norris—KJ5SS, presented the Treasurer's report dated July 31, 1996, showing a balance of \$4,942.42. Pete stated that B-VARC currently has a total of 151 members. Pete stated that the club was going to refund the cost of the Field Day dinner for T.J. and Patricia Layton, since they were not able to attend. The treasurer's report was approved with a motion that passed unanimously. Pete brought up the subject of the life membership and putting that money into a separate, interest-bearing account.

There being no further business, the meeting was adjourned by Ron Grimes—WA5SCE, at 8:33 p.m. with a motion, second and unanimous vote.



MEMBERSHIP REPORT

by Pete Norris—KJ5SS

As of August 1, 1996, the current membership for the club is:

151

HOUSTON HAM INFO. LINE

495-3495

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

HAND GUN

Carry Concealed Permit

CLASSES

Bill Reid Don Brown

(713) 341-1500

Texas D.P.S. Concealed Handgun Instructors

Westheimer Airpark
a Division of Red Management Co.

Don Brown, Sr.
Operations Manager

(713) 341-9641
Alt. No: (713) 392-3587
(713) 240-1009

24215 FM 1393 • Richmond, TX 77469
One and One-half Mile West of Grand Parkway
Flight School • Hangarage • Tie Downs

THE INTERNET

by Jackie Burton—KC5OHJ

The following article is the twelfth in a series of articles John Moore—KK5NUJ has written for publication in the B-VARC Bulletin.

The Editor

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All You Want to Know About the Internet and More

by John W. Moore—KK5NUJ

Sorting Out the Program—Back to Internet 101

It has been said and observed that about 85% of the usage of the internet for the average, ordinary user is e-mail or so-called "electronic mail." As fast as the proverbial "speed of light," the message that you compose and transfer from your local computer, sitting as a node on the net, through that mysterious network of linked computers that we have come to know as the "internet," to its ultimate destination at your recipient's local server or terminal, is a fairly simple description of the bulk of the usage of the net.

The sole criteria that must be met is that both you, as the sender and your selected recipient as well, must have valid internet addresses. Within this simple framework, your message will, in due course, depending on the routing tables, usage and network traffic, get through to your selected destination. However, unlike the U.S. Postal Service's "snail mail," there is very little in the way of directory assistance and your vitally important communicate may, in due course, if not properly addressed, end up lost in the vastness of cyberspace. It is crucial to your e-mail efforts that you know the exact address of your intended recipient and that you very carefully conform to the accepted protocol in your addressing of the message. In the world of cyberspace, there is no room for mistakes and the failure to conform to the rules of addressing is guaranteed to spell disaster for your efforts. In short, follow the rules of "TO: user@server.system.domain" and you should have no problems. The very best way to get someone's address is to have them send you a message. You then reply to the sender at the address from which you received the missive.

Also high on the list of frequency of use is the reading and possible replying to

newsgroups. At this writing, there are in excess of 16,000 newsgroups worldwide. And, not surprisingly, not all of them are confined to the use of the English language. So, if you have a linguist bent toward the French, German, Russian or one or more of the oriental languages, it can be found on the net. Of the some 12,000 or more that use English as the primary language, you will find at least one or more that will be of interest, and, with the structure and makeup of the internet, the like and similar that will be repugnant to your ideals. Welcome to the "real world." For what it is worth, if you don't find just the subject that you want to hold forth on, you are free to start your very own newsgroup. Most newsgroups are unmoderated, and as such, all may post freely to them. From a netiquette standpoint, and to avoid "flames" or missile messages, it would behoove you to read the news in the area for a week or two to ascertain something of the flow of information. Get a list of the FAQs or Frequently Asked Questions and learn something about the group before you take the plunge.

Some of the more widely discussed topics have mailing lists or automated mechanisms to allow one to subscribe to the materials being posted to that subject. Be advised that some of these maillists are extremely large in terms of content and numbers of messages. You may wish to check with your ISP and find out your limits on disk and storage space before you subscribe. Keep your messages downloaded to your local system or terminal on a regular basis and know how to unsubscribe in order to terminate the flow of information if it suddenly becomes unbearable to you.

For those who are so inclined, FTP or File Transfer Protocol, is the only way to get the latest and greatest material from that distant server to your local machine so that you can be the first on the block to have the new program to play with. As a general rule, most repositories allow you to log in with the username "anonymous" and your e-mail address as the password. From your UNIX shell command line, after issuing the proper series of commands to show the rate of transfer as well as getting the file in "bin" format, or with the ftp client configured properly, at the speed of light you will find that coveted file residing on your local machine waiting for you to unarchive it and get it up and working at its prescribed task. The volume and amount of material that is out there literally "free for

the asking is tremendous. Your only task is finding the proper location from which to fetch it.

More to come... John Moore—KK5NU

VE EXAM RESULTS AUGUST 1996

by Harold Parker—ND5F

B-VARC again sponsored and administered the ARRL's Amateur Radio Examinations that were held on Tuesday evening, August 13, 1996 at Strake Jesuit College Preparatory in Houston.

The VE Team consisted of:

Carl Albrecht -	AA5JW
Henry Morrison -	W5RIY
Harold Parker -	ND5F

The Assistants were:

Irene Gordon -	N5AYX
John Moore -	KK5NU
Don Schexnaider -	AB5IV

A total of 12 exams were administered during the evening to 8 applicants. Two (2) unlicensed candidates received their new Technician licenses and one (1) upgraded with a total of 7 elements passed. The overall "pass rate" for the evening was 58%.

Congratulations to all the following who upgraded and/or passed exams:

Thomas Genoso - Element 2
Gene Gilbert—KK5WO - Element 4B
Joe Sam—KC5SJU - General
Jeryllyn Seay - Technician
Rosana Stoessel - Element 2
Andrew Warren - 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 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

Ten Ten International has announced that its 1997 national convention will be held July 11-13, 1997, in Council Bluffs, IA. Several chapters, including Houston SHOT, submitted convention proposals to the Planning Committee. The SHOT chapter proposal consisted of a combined Ten Ten Convention and Gulf Coast Ham Convention in Humble, TX. Ten Ten International usually has its convention in July or August, and the Planning Committee felt that the date of the Gulf Coast Ham Convention was too late in the year.

The Ten Ten Summer QSO party was held August 3-4, 1996. Propagation was the best that it has been for any Ten Ten QSO party in several years. I spent 5 hours participating in the contest, and worked 26 states, but no DX. Several DX stations were heard by Houston stations, including Latin Americans, and an IK2 in Europe. The SHOT chapter thanks all Houston area stations that participated with the chapter in the QSO party.

Members of the SHOT chapter are often asked how to join Ten Ten International. To qualify for membership, a station must work ten members of Ten Ten on the 10m band. The call sign, Ten Ten number, name and QTH of each station is listed in log format, and sent to the following address:

October-June
Grace Dunlap—K5MRU
P.O. Box 445
LaFeria, TX 78559-0445

June-October
Grace Dunlap—K5MRU
P.O. Box 13
Rand, CO 80473-0013

The cost is \$10, and checks should be made out to 10-10 International Net, Inc. This fee covers dues for one year, and the cost of a membership certificate. If you are already a member of Ten Ten International and want to renew your membership, the cost is also \$10 per year, and renewals should be mailed to:

10-10 International Net, Inc
643 N. 98th Street, #142
Omaha, NE 68114-2332

To join the Houston SHOT chapter, local stations must have a Ten Ten number, a

check into one of the chapter's nets on a Tuesday evening. The cost to join SHOT is a one time fee of \$3 plus 2 first class stamps, which covers the cost of a membership certificate.

Paper chasers continue to be active on 28.345MHz and 28.375MHz when the band is open. Chapters with specials this month include Broken Hearts (AL), Choo Choo Belles (GA), Pirates of the Mississippi (IL) and Steel City (IL). The Fort McHenry and Cornerstone chapters have announced that Bill Jowanowitch—K3TUJ, is their new certificate manager.

The summer E-layer propagation experienced during the weekend of the QSO party was excellent. Even though DX propagation has been poor, a few Latin Americans continue to be worked when conditions permit. Propagation on 10m will improve in the coming months as we head into the next solar cycle.

Remember, the Houston S.H.O.T. (Space Houston on Ten) 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 July:

July 3, 1996

N5CPA (NCS), KK5W, W5EFB, W5GHK, N5OAC, W5GLD, N5ECP, KC5NMR, WD5CJL, AB5OK, KK5RL, KK5DO, N5UOG, KG5KV.

July 10, 1996

N5CPA (NCS), KISSC, KB5PAJ, N5AFV, KC5VAT, KC5NMR, W5SNH, KK5DO, W5IHY, WD5CJL, KK5RL, W5GLD.

July 17, 1996

N5CPA (NCS), KISSC, KB5PAJ, N5UOG, W5SNH, VE3GAP PORTABLE, KK5DO, N5ECP, W5GHK, WD5CJL, KK5RL, KG5KV, W5A, KC5NMR.

N5CPA (NCS), W5EFB, KI5SC, KB5PAJ, WD5CJL, W5SNI, KK5RL, W5PIY, KC5QZD.

July 31, 1996

N5CPA (NCS), N5ECP, W5SNEI, N5OAC, KG5KV, KI5SC, KB5PAJ, N5AFV, W5GLD, W5EFB, WD5CJL, KF5NU, W5IHY, KK5DO, KC5NMR, KK5RL, KO4QX.

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 July 1996. Only the count is listed, as there is not enough room to list individual call signs:

July 1, 1996	35
July 8, 1996	32
July 15, 1996	??
July 22, 1996	36
July 29, 1996	44

UPCOMING SWAPFESTS . . .

Belton, Texas

Date: October 5, 1996

Location: Bell County Expo Center, Belton, TX

For Info: Mike—WASEQQ, (817) 773-3590 or e-mail: m1efan@vvm.com

Houston, Texas

Date: October 11-13, 1996

For Info: Bruce Paige—KK5DO, 933-8385

SCANNER JACK'S CORNER

by Jack Roberts—KB5TMY

Here are the DPS frequencies:

- 154.680 Houston Car to Dispatch
- 155.460 Houston Dispatch to Car
- 154.950 Car to Car
- 155.370 Texas Rangers
- 154.695 Pierce Car to Dispatch
- 155.445 Pierce Dispatch to Car
- 155.535 Pierce
- 159.090 Texas Rangers
- 156.210 TABC
- 154.665 Pierce
- 154.905 Texas Rangers - TABC

- 159.210 Houston KKC-588
- 154.920 Texas Rangers
- 154.935 Texas Rangers
- 156.060 TABC
- 159.150 Texas Rangers
- 155.475 Texas Rangers
- 453.550 Texas Rangers
- 164.600 Texas Rangers

The reason you do not hear DPS that much is because each county they patrol in gave the mobiles 800MHz radios. 800MHz is where all the action is.

B-VARC CODE PRACTICE NET

by Bruce Paige—KK5DO

B-VARC sponsors a Morse Code Practice Net, called BCN, on Monday and Wednesday nights at 8:30 p.m. CDST, with the exception of the last Monday of the month. The purpose of this net is to offer a consistent code practice schedule for all amateurs who are working on their upgrades. The practice text is sent at approximately 5, 8, 10 and 13 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 welcome 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 28.146.47MHz CW, with a desire to increase your code proficiency and have a good time.

All copy will come from QST and code is generated from a computer text file.

PUBLIC SERVICE EVENTS

by Mike Hardwick—N5VCX

September 21-22, 1996

Ellington Air Show
Contact: Bill Terrell, 338-2918

October 6, 1996

American Diabetes Walktoberfest
Contact: Houston ECHO Society

October 12-13, 1996

Alamo Challenge Bike Ride
Contact: Mike Hardwick—N5VCX, 771-4625

October 12-13, 1996

Symphony Classic Bike Ride
Contact: Bret Prichard—N5VOY.

645-5400

October 20, 1996

20K Warm-Up
Contact: Steve Dunkelberger—N5JBL, 781-6703

November 17, 1996

25K Warm-Up
Contact: Allen Mattis—N5AFV, 721-3637

December 7, 1996

30K Warm-Up
Contact: Don Wade—WB5IBT, 242-6706

January 12, 1997

Houston Tenneco Marathon
Contact: Carl Hacker—KB5LDY, 977-9754

PROFILES

[None provided.]

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
6:30 p.m.	RACES Net 146.84MHz (103.5PL)
8:00 p.m.	Ten Ten SHOT Net 28.488MHz
8:00 p.m.	AMSAT Net 147.10MHz
	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 Emerg. Mgmt. Net 146.84MHz (SkyWarn RACES)
	Sunday
7:30 p.m.	ARES Net 147.30MHz
	2nd & 4th Sundays
1:30 p.m.	TX State RACES Net 7.248MHz

RFI, EMI AND OTHER STUFF

by Pete Norris—KJ5SS

Now that we have introduced the notion of electric fields, imagine this: a stationary positive charge located in space. The radial field extends outward from a positive charge. Now imagine a positive "test" charge located a long way from our stationary charge. This positive test charge has a field like the stationary charge. Both fields are undistorted because of the great distance separating the two charges, as in the first illustration last month. Now imagine the test charge being brought through space until it is close to stationary charge as in the last illustration last month. The fields will now be distorted and one might think of the field as springs trying to push the test charge away from the stationary charge. This "push" is a force, and we know about forces. The value of the force was given last time as:

$$F = k_e(Q_1 Q_2 / L^2)$$

A force acting through a distance is energy $w = F * L$, so that we now have a way to describe electrical energy in mechanical terms.

Let's demonstrate this stuff just to see how this works. Two light "balls" suspended by light thread will repel each other when charged from a comb. Two thin strips of paper will separate when charged with like charges. The charge "leaks" off rapidly, so keep a sharp eye on the charged objects.

If the charge is one Coulomb (1 C) and the force required is one Newton (1 N) to move the charge one meter, thus doing one Joule (1 J) of work (or increasing the energy by 1 J), the ratio of 1 J/1 C is the Volt! Thus $V = w/Q$ for which $1 V = 1 J / 1 C$. One Volt is equal to the energy of one Joule (a Newton Meter) per one Coulomb. Another way to look at this is

$$1 V * 1 C = 1 J$$

which says one Coulomb moved through a potential of one Volt requires one Joule of energy (work), which is what is accomplished in a cell or battery. Chemical energy is converted to electrical energy and the result is a positive charge on the other. For a standard flashlight cell the potential is about 1.5 Volts and the number of Coulombs available is determined by the size of the cell. Now, assuming 100% efficiency, if this Coulomb, at the potential of a Volt, drives an electric motor so that all the electrons flowed through the motor

to the opposite terminal of the cell (the equivalent to "running the battery down"), the motor could raise a weight (force) of one Newton (XX kg) through a distance of one Meter. Fantastic!

$$1 C * 1 V = 1 N * 1 M !!!$$

We have now related mechanical energy to electrical energy. Let's update our table and then we will speak to power

¹Named for Allesandro Volta (1745-1817), an Italian physicist.

ANTENNA COLUMN

by Rick Hiller—KF5NU

Nothing provided this month. Stay tuned for next month's column!

Blank

<u>Quantity</u>	<u>Unit</u>		
	<u>English</u>	<u>MKS</u>	<u>CGS</u>
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)	Coulomb (C)	Coulomb (C)
velocity (v)	ft/s	m/s	cm/s
acceleration (a)	ft/s ²	m/s ²	cm/s ²
force (f)	pound (lb)	Newton (N)	dyne (dyn)
work (w)	ft-lb	Joule (J)	erg
power (p)	ft-lb/s	Watt (W)	erg/s
Volt (V)	ft-lb/C	J/C	erg/C



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

B-VARC CALENDAR OF EVENTS FOR SEPTEMBER 1996

5th	7:30 p.m. - B-VARC Board meeting	21st	Public Service Event - Ellington Air Show
12th	7:30 p.m. - B-VARC regular monthly meeting	22nd	Public Service Event - Ellington Air Show
20th	6:30 p.m. - Friday night dinner - location TBA		

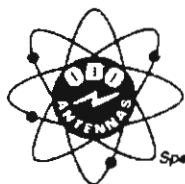
B-VARC CALENDAR OF EVENT FOR OCTOBER 1996

3rd	7:30 p.m. - B-VARC Board meeting	12th-13th	Public Service Event - 1996 Symphony Classic
6th	Public Service Event-American Diabetes Walktoberfest	12th-13th	Public Service Event - Alamo Challenge Bike Ride
8th	6:00 p.m. - B-VARC VE Testing Session	17th	7:30 p.m. - B-VARC regular monthly meeting
11th-13th	Gulf Coast HAMCOM - Houston HamVention	20th	Public Service Event - Marathon 20K Warm-Up

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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 _____



The Monthly Publication of the
 BRAZOS VALLEY AMATEUR RADIO CLUB
 Serving the Greater Houston Area
 Club Call Sign—KC5OIG
 B-VARC's Home Page: <http://www.hal-pc.org/~bvarc>

Editor-in-Chief: Jackie Burton—KC5OHJ (713) 460-1968
 e-mail address: jburt@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
Tuesday, September 5th 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
Tuesday, September 12th 7:30 p.m. Program: Ham Radio and the Internet by Bill Kemp—KG5CB	B-VARC Regular Meeting Sugar Land Community Center	3rd Friday Dinners—6:30 p.m. SHARP! Locations announced each month

BRAZOS VALLEY AMATEUR RADIO CLUB
 PO BOX 1630
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 ADDRESS CORRECTION REQUESTED

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