

BRAZOS VALLEY AMATEUR RADIO CLUB



AMATEUR RADIO FOR SOUTHWEST HOUSTON AND FORT BEND COUNTY

SEPTEMBER 2015

VOLUME 39 ISSUE 9

BVARC SEPTEMBER GENERAL MEMBERSHIP MEETING

7:30 PM, Thursday, September 10th, 2015 421 Eldridge Rd, Sugar Land, 77478, Sugar Land Masonic Lodge

What is a piece of conductive material stuck in the air used for - Antennas!

The one thing that you need to make your radio equipment work the best is an antenna. Not just any antenna but one that is designed for the frequency you are operating on. It has to be efficient and sending the signal in the right direction. To understand all of this and how it is done, BVARC's super antenna master Rick Hiller, W5RH, will show you how to design, use and troubleshoot various antenna designs. This is one meeting you should not miss!

Ed. Note: See info inside about special legislation letter writing to take place before and after the meeting and during the break.





August Meeting Recap - It's Not Blue Bell - Couldn't You Tell!

I know it wasn't Blue Bell but we still had a great turn out. Michael Monsour did his magic in spite of not having the premium ice cream. Over 60 club members came out to enjoy an evening of socializing and eating ice cream. There were also 20 visitors that came in to help round out the feeding frenzy which helped clean out the left over chocolate and vanilla. Michael did a great job and several people won Baofeng hand held radios and Skeeters tickets. It was a great time for everyone. Also, a by-laws amendment to lower the quorum requirement was passed.





Upcoming Meetings

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

October 8th Repeater Basics 101 Jeff Scott, W5JSC

November 12th Elections & Chili Supper

December 10th D-Star Alan, Isaachsen, KB2WF

January 15th, 2016 BVARC Annual Banquet Confirmed

February 11th, 2016 Emergency Communications – Go Kit Building Kerry Mallory, AE5JY

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

73 N5VCX





The Vice Prez Says

The summer is almost over and it has been a trying one for BVARC. Bill Stone, WS5H, passed away late July after battling cancer. He brought a lot to the club and amateur radio and will be missed. Even though Bill and I fought like cats and dogs several years ago, I had come to respect him and appreciate the things that he had done for the club and amateur radio. I will miss him and his insight on many areas for both the club and the hobby. There will be a memorial service for Bill on September 19th at 10:00. The information on the service is elsewhere in the newsletter.

The August meeting was in BVARC's new location and it went very well. The Sugar Land Masonic lodge on Eldridge road and has been confirmed and reserved through June 2016 for BVARC meetings. We will no longer have to fight for parking spaces or share a location with 2000 of our closest friends. We no longer have to stand and wait in the parking lot or on sidewalk until our appointed time. We can come in and socialize and tell lies in a much more comfortable atmosphere. There is even a chance hot dogs and coffee will be brought back (if I can convince Darrel to handle the coffee again). A new beginning for BVARC and it is a positive one.

Even though it was not Blue Bell, it was a great ice cream social. Over 60 club members with 20 guests came out to enjoy ice cream and help with club functions. The 60 members voted on an amendment change to the club's by-laws making it easier to obtain the required number of members for a quorum. So the new requirement for a quorum is 15 members or 10% of the membership. This will allow the club to function much easier when membership votes are required.

Besides having the great antenna guru, Rick Hiller, W5RH, for the September meeting, we will also have John Stratton at the meeting. He will be there to promote a letter writing campaign for HR-1301 and S-1685. He will be available before the meeting in the entry way to discuss the bills and what they mean to amateur radio. There is more information elsewhere in the newsletter on John's visit.

Club Elections will be coming up in November. If you would like to help the club by volunteering your time to be on the board of directors, please contact someone on the board and let them know. You can also have someone nominate you from the floor before the elections. The positions that will be open are: president, recording secretary, two year director, one year director. Please consider running for one of the positions on the BVARC board of directors.

73, Mike N5VCX



BVARC Rag Chew Net August Check-Ins

06/24/15, W5TKZ (NCS), W5HFF, KF5TFJ, WS5H, K5IZO, W5TOM, N5EWK (Katy), K5LJ, WA5CYI, AF5T, W5RH, KE5OBY, KD5FBA (13 Check-Ins) Solar Cycle 24: SFI = 116, SN = 61, A = 76, K = 3

07/01/15, K5LKJ (NCS), W5TOM, KF5TFJ, W5TKZ, W5HFF, K5LJ, AF5T, K5IZO, N5VCX, KE5OBY, W5RH, AA0ST (Dickinson), N5EKW (Katy), KD5FBA, KC5JAR (Katy), WD5CQO (Nederland), K5FAB (17 Check-Ins) Solar Cycle 24: SFI = 108, SN = 41, A = 6, K = 2

07/08/15, K5LKJ (NCS), W5HFF, W5TKZ, KF5TFJ, K5LJ, K5IZO/5 (P)(Jasper), AF5T, W5TOM, K0NM, KT5M5 (Dickinson), AA0ST (Dickenson), KE5OBY, W5RH, AF5XL. (14 Check-Ins) Solar Cycle 24: SFI = 134, SN = 131, A = 25, K = 1

07/15/15, K5LKJ (NCS), W5HFF, W5TOM, W5TKZ, KF5TFJ, K5LJ, W5RH, AA0ST (Dickinson), KT5MR (Dickinson), AF5T, K5IZO, KF5PHA, N5EKW, KE5OBY, KD5FBA, KF5JMJ (Pasadena). (16 Check-Ins) Solar Cycle 24: SFI = 108, SN = 39, A = 7, K = 2

07/22/15, K5LKJ (NCS), W5TKZ, W5TOM, KF5TFJ, W5HFF, K5LJ, AF5T, W5RH, KF5PHA, AA0ST (Dickinson), K5IZO, KT5MR (Dickinson), KE5OBY, WD5KXG. (14 Check-Ins) Solar Cycle 24: SFI = 88, SN = 37, A = 10, K = 3





September is Antenna month at BVARC

W5RH continues the series on antennas in the newsletter.

The Radio Hotel -- Antennas-Part 7

is all about antenna loading.

Plus, at the September 10th meeting, W5RH presents "Antennas: The Tools to Design, Build and Troubleshoot Them"

A very practical look at building antennas and the process, parts and skills needed to do that.

Bill Stone Memorial Service

As most of you know BVARC's President Bill Stone, WS5H, passed away late last month after a long battle with cancer. Bill fought the disease with strength and determination while staying involved with BVARC and amateur radio. When I talked to him a few days before he died, he joked with me while giving me insight on the way things need to be done at BVARC. We lost a good friend and positive force for amateur radio with his passing.

Bill had support from friends and family throughout his life. He also had support from a group that helped him fight off one of life's demons. That group, Alcoholics Anonymous, helped Bill turn his life around for nearly twenty years. Without the help of AA, Bill would have never entered amateur radio and that would have been a loss for so many of us. To honor Bill, a memorial service has been arranged at the AA club in Southwest Houston that Bill attended. Both Bill's wife Norma and Lin, a close friend of Bill's from the club, feel that it would be appropriate to have a celebration of life service at the club that Bill attended.

Mike Hardwick, N5VCX; Vice President, Brazos Valley Amateur Radio Club



Remembering William "Bill" Stone, WS5H

Every one, with their ultimate passing, leaves one thing behind. Memories. Memories in the minds of those still alive. Those memories are very personal and, hopefully, special to the owner. From what has been stated on the air and on the BVARC Reflector, there are many Hams that have these special memories of Bill. Those special instances where you had a good QSO, or heard of a neat operating trick from Bill or even got an earful of Bill, but memories none the less.

So, with these memories in mind (no pun intended), let me take you thru the Radio Amateur's Code and see if you don't recognize the true "Radio Amateur" that was Bill Stone, WS5H.

The Radio Amateur's Code*

The Radio Amateur is

CONSIDERATE...Bill never knowingly operated in such a way as to lessen the pleasure of others.

LOYAL...Bill offered loyalty, encouragement and support to other amateurs, local clubs and other clubs and groups both nationally and internationally.

PROGRESSIVE...Bill kept his station up to date. It was well-built and efficient. His operating practice was above reproach. (Maybe his gear was older, but it was always sounding good and Bill kept up with computer applications that supported Ham Radio logging and contesting, etc.)

FRIENDLY...Bill operated slowly and patiently when requested; offered friendly advice and counsel to beginners; kind assistance, cooperation and consideration for the interests of others. These are the marks of the amateur spirit!

BALANCED...Radio is a hobby, never interfering with duties owed to family, job, school or community. (*I do not know of Bill outside of the Ham Radio ranks, but if he had half of the enthusiasm in another venture that he had in Ham Radio, then they also got Bill's best.)*

PATRIOTIC...Bill's station and skills were always ready for service to country and community. (West Oaks Hospital and Museum Ships.... 'nuf said.)

* adapted from the original Amateur's Code, written by Paul M. Segal, W9EEA, in 1928

73....W5RH





Results of the August 11th BVARC Amateur License Examination Session by: John Moore, KK5NU

B-VARC sponsored and administered the ARRL's Amateur Radio Examination session that was held on Tuesday, August 11, 2015 at HCC's Scarcella Science & Technology Building here in Stafford, TX.

MEMBERS OF THE VE TEAM:

Richard Goldy, K5GOL Larry Jacobson, K5LJ John Moore, KK5NU George Ontko, KM5VP

Four examination elements were administered during the evening to three applicants. One new Technician class, one new General class and one upgrade to General class license were attained, with the total number of elements passed being 4. The overall "pass rate" for the evening was 100%.

Congratulations to the following who attained a license and/or passed an exam:

Timothy J. Janecke - {KG5IZJ} - Technician
Thomas E. Johnson - KG5GLX - General
David J. Kloesel - {KG5IZK} - General

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

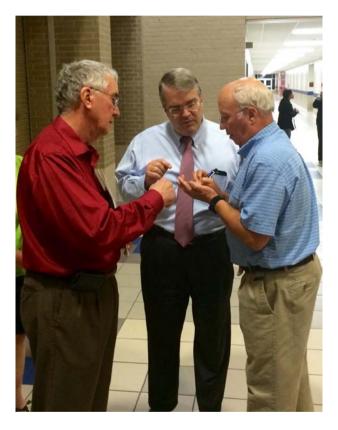
At the September General Membership Meeting: U.S. House of Representatives and U.S. Senate letter writing re the Amateur Radio Parity Act

John Robert Stratton, N5AUS, the ARRL Vice-Director for the West Gulf Division, will be in attendance at the September meeting. He will give a 5 minute announcement during the announcement part of the meeting. On a non-interference basis, a computer and printer will be set up and used to generate letters to your U.S. House Representative and both of your U.S. Senators asking them to co-sponsor the Amateur Radio Parity Act. Using your call sign, the letters will properly address the letters and type in your name and address as appropriate. All you will need to do is sign it and hand it back.

HR-1301 and S-1685 have already been introduced in the House and Senate respectively.

These letters will then be taken and sent to the ARRL lobbyist so they can hand carry them to the respective office holders. ARRL strongly suggests sending the letters via ARRL as letters sent directly to Representatives and Senators are held and screened, primarily because of the Anthrax problems, and thus will incur many weeks if not months of delay.

We will begin about an hour before the meeting. Just sign in at the desk with your call and your letter will be ready either before the meeting, during the break or immediately after the meeting. As a courtesy to the members and the speaker, please do not come to the desk during the meeting itself.



Jim Burrough, N5DTT and John Chauvin, K5IZO talking with U.S. Representative John Culberson at a meeting in Katy on August 19. John Stratton, N5AUS, drove in from Austin for this meeting and took the photograph.



Hamfests

(within 200 miles of Houston)

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

10/03/2015 | HamEXPO

Location: Belton, TX
Type: ARRL Hamfest

Sponsor: Temple Amateur Radio Club **Website:** http://www.tarc.org/hamexpo/

10/31/2015 | South Texas Hamfest

Location: Aransas Pass, TX

Type: ARRL Hamfest

Sponsor: South Texas Hamfest Association **Website:** http://www.southtexashamfest.org

2016 Greater Houston Hamfest

It's never too early to start the Planning for the Greater Houston Hamfest (GHH) and the planning and marketing of the GHH is underway. Some of you have already been called to duty and the work has begun.

First let me report to you the official date is March 19, 2016 and the location will once again be at the Fort Bend County Fairgrounds. Many of you have been looking forward to a change in location and I assure you we have been working on a plan for other venues. The long term plan is still to find a new home for the GHH, and the search will continue.

I am pleased to announce we have added additional buildings to the GHH floorplan. With more space comes the responsibility to fill it in a way that will maximize on our investment. We have received many suggestions that will increase the value of an admission ticket to the GHH.

Many of you have already been contacted to support the GHH in some form or fashion. I will begin the search for volunteers by simply reminding everyone to save the date and remember the GHH is the one huge revenue making event for BVARC each year. If you have suggestions or wish to volunteer to help out please let me know. I would request that you send any GHH related emails to the nathan@houstonhamfest.org so they don't get lost.

Last year we were honored to host Dr. Joe Taylor whom I believe helped push our attendance to an all-time record. This year we are pleased to announce that Riley Hollingsworth, K4ZDH has enthusiastically accepted our invitation to be our featured speaker. Riley is the former FCC Special Counsel for the Spectrum Enforcement Division now retired and a fantastic speaker. For more information I will direct you to the Greater Houston Hamfest Website, www.houstonhamfest.org.

There are many more fantastic changes coming to the GHH this year so keep your ears open! And as always I would refer all questions to the contact emails created for GHH.

Thank You all for supporting the GHH and BVARC!

Nathan Vessey, N5NYV Greater Houston Hamfest Chairman nathan@houstonhamfest.org Michael Wrenn, K5WRN Greater Houston Hamfest Co-Chairman/Vendor Liaison Michael@houstonhamfest.org





Elections are Just Around the Corner

Hillary, Carly, Donald, Bernie? No....we are looking for a few of our own to vote for.

The November 2015 meeting includes the Chili Supper, but before the victuals are devoured we vote for a new President, Recording Secretary,

2 Year-At Large and 1 Year-at Large Board members.

If you, or someone you know, would like to join the current BVARC Board of Directors in running the club for 2016 and 2017, please contact me, Rick Hiller – W5RH at rhiller@sdicgm.com or 832-474-3713(cell).

3 former BVARC Presidents (Kirk, KK2Z and Mike, N5VCX) and I make up the 2015 Election Committee.

We look forward to hearing from you.





Radiosport Items of Note for Septemner 2015

For a complete list of contests click the link below http://www.hornucopia.com/contestcal/contestcal.html

State QSO Parties – An easy way to try a contest for the first time. If you happen to need these states for WAS, they are a great way to work states to work states you can't easily find on the bands otherwise.

- Texas QSO Party Sept 26-27
- Colorado OSO Party

 Sept 5-6
- Tennessee QSO Party Sept 6-7
- Arkansas QSO Party Sept 12-13
- South Carolina QSO Party Sept 19-20
- New Jersey QSO Party Sept 19-20
- Maine QSO Party Sept 26-27

Mixed Mode Contests

Washington State Salmon Run Sept 19-20

SSB Contests

- All Asian DX Contest, Phone Sept 5-6
- WAE DX Contest SSB, Sept 12-13

CW Contests

None of interest this month

Digital Contests

• CQ WW DX Contest RTTY Sept 26-27

Selected Special Event Activities

- Commemorating the 70th anniversary of VJ day in Europe and USA Sept 1-4, GB2VJ
- Hurricane Katrina 10th Anniversary Week-Long Special Event: Aug 26 Sept 2 K5H
- National POW MIA Recognition Day Special Event Station Sep 9-Sep 20, K4MIA
- 2015 Route 66 On The Air Special Event Sept 12-20
- Plano Balloon Festival Sep 18-Sep 21, K5P
- Bankhead Military Vehicle Convoy On-The-Air Event Sep 19-Oct 17
- Lunar Eclipse, Sep 25-Sep 28, K0L
- 195th Anniversary of the Founding of the Austin Colony, Sep 26-Sep 27, W5SFA

And The Ever Popular . . .

47th Annual National Hollerin' Contest Sep 12, N4C

For details on every Special Event in August, go to

http://www.arrl.org/special_events/search/page:3/Date.start:2015-09-01/Date.end:2015-09-30/model:Event





Camp Hope Ham Radio Announcement

I am excited to have an opportunity to introduce ham radio to Camp Hope, a PSTD recovery center here in Houston. And, I want to do this in a big way. Therefore I need your help. Here is why I want to do this: I became a ham in 2011, one of the most personally difficult years in my life. I am certain, looking back on it, that I was dealing with depression. Getting my technician ticket was the start on my ham radio journey that has led to abundant friendships though this hobby. In a conversation with Jim Mehrmann, Pappy, of Camp Hope, it made sense to bring ham radio to Camp Hope.

Many of our vets who were injured in combat return home physically ok, but on the inside, they suffer emotionally from the unseen wounds of war. It can take many months for these emotional injuries to heal. Sometimes they heal without intervention. However, for many soldiers, sailors, airmen and marines some intervention is needed.

Will you help me introduce these great Americans to ham radio in order to help them gain new friends, learn a fun and exciting hobby and maybe even find a job through their new network? We will have five different radios demonstrating everything from SDR to DSTAR and in between. We will operate at the annual Camp

Hope BBQ cook-off from 10:00AM to 6:00PM on October 10, 2015. Antenna setup and testing will occur on October 9, 2015. We will need approximately 6 volunteers in three hour shifts, for a total of 18 volunteers to effectively accomplish our mission.

Stations included are:

- 1. 40 meter SSB QSO with W5LEX for dual contact.
- 2. 20 meter special event station (K0D)
- 3. 2 meter station demo
- 4. DSTAR demo if DSTAR operators are available
- 5. 10-10 contest station to demo contest.

Also, please advise me if you would like to demonstrate a specific mode of operation and have the equipment, we should be able to accommodate your demonstration.

More details will come by September 7, 2015. Please keep an eye on the reflector, the BVARC Facebook page and the Camp Hope HRC Facebook page. For more information on Camp Hope, please see www.ptsdusa.org.

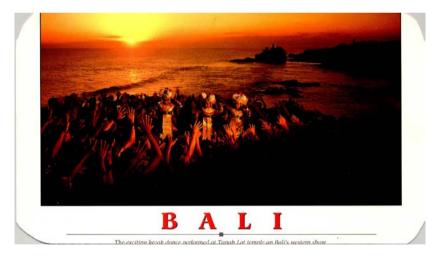
Please contact me by email if you are able to volunteer for this project. Your support would be greatly appreciated. Also, feel free to call me on my cell phone should you have any questions.

Bob Hawkins, KD5AT, Kd5at@arrl.net, 281-827-9135



BVARC Historical Vignettes – KG5KV Lost in Indonesia – Part 1 Allen Mattis N5AFV, Club Historian

In August 1993, BVARC member Charlie Prochaska, KG5KV, an engineering consultant, accepted a one month contract to work in Indonesia. Charlie was a regular attendee at the BVARC Saturday morning breakfast. While in Indonesia, Charlie mailed a post card every week and these post cards were passed around at the Saturday morning breakfast. Most of the post cards mentioned something about amateur radio and also displayed Charlie's keen sense of humor. Part 2 next month will show another post card from Charlie. A special thank you to BVARC member Carl Hacker, WC5WM, for providing me with six post cards that Charlie sent from Indonesia.



DEAR BUARC MEMBERS AUG 1993 I Knew I'd FIND THE RIGHT GROUP IF I KEPT LOOKING. THEY ALL WANT A RADIO, PLEASE SEND 300 RIGHT AWAY. IF THE CLUB CANT AFFORD NEW IC 8515 for ALL, THEN I guess crystal sets will do to get storted. PLEASE HURRY, I clost think they will keep they hards up much lorger after the show ends.

BVARC Monday Night NET Updates

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

5/18 - 27 - Cam, k5cam	6/22 - 24 - Pete, kd5qpx	7/27 - 28 - Rick, w5rh
5/25 - 16 - Pete, kd5qpx	6/29 - 22 - Ron, k5hm	8/3 - 29 - Rick, w5rh
6/1 - 24 - David, n5ekw	7/6 - 20 - David, n5ekw	8/10 - 29 - Rick,w5rh
6/8 - 26 - Rick, w5rh	7/13 23 - Rick, w5rh	8/17 - 35 - Ron, k5hm
6/15 - 22 - Terry, k5pgf	7/20 - 15 - Ron, k5hm	8/24 - 27 - Pete, kd5qpx





Minutes of the August 8th, 2015 Board of Directors meeting of the Brazos Valley Amateur Radio Club

Mike Hardwick called the monthly Board of Directors meeting for the Brazos Valley Amateur Radio Club to at 10:00 AM on August 8th, 2015, Saturday at Bayland Park Community Center, 6400 Bissonnet, Houston 77074. Attending were: Mike Hardwick N5VCX (V.P.), Bob Tomlinson N5JSL (Treas.), Michael Monsour ACØTX (Rec.Sec./Quart.), Stephanie Vessey K5SFV (Cor. Sec, QSL Manager), Scott Medbury KD5FBA (2yr At-Large Dir), Jerry Muller K9GEM (2yr At-Large Dir.), Darrel Kirk KC5JAR (1 yr At-Large Dir), Eddie Runner NU5K (Webmaster), Suzanne Runner KF5GWZ, Cameron Mitchell K5CAM, John Chauvin K5IZO (Newsletter Editor/Parliamentarian), Rick Hiller W5RH, Ron Litt K5HM (Radio Sport), Pete Sauermilch KD5QPX (facility manager), Nathan Vessey N5NYV, (Hamfest Chairman) Donovan Balli KG5BDZ (future Treasurer), Opening statement by the chairman:

1.1 A memorial service for Bill Stone is being planned by one of the other groups that Bill was close to, which will probably happen in September.

Emergency Business:

- 2.1 The present treasurer will be moving to Idaho and will be resigning very soon. Donovan Balli KG5BDZ has volunteered to finish out Bob Tomlinson's term. A motion was made and passed to appoint Donovan Balli as Treasurer to finish out Bob's term.
 - 2.2 The President's position: Three options; hold a special election, appoint a president or keep things as they are. A motion was made and passed to keeps things as they are. The acting president can only vote as a tiebreaker.

Reports:

- 3.1 A motion was made and passed to accept last month's minutes.
- 3.2 Treasurer's Report: There was no activity at all in the month of July. A motion was made and passed to accept the Treasurer's Report. Old Business:
- 4.1 The Masonic contract has been signed. Peter Sauermilch KD5QPX is the facility's committee manager. A check for ten months rent + deposit has been written up. The Masons have a fiscal year from July to June. There is a \$500 charge for a lost key.
 - 4.2 Hamfest wrap up meeting will be discussed a noon today.
 - 4.3 Meetings: August 13 Ice Cream Social, By Laws Amendment vote. The Baofengs have been ordered will only be given out if a quorum is reached. September 10th, Rick Hiller will do Antenna Design and Troubleshooting. Oct 8th is open with possibilities of Homebrew night, an auction or something else.
 - Nov 12th Chili Supper and Elections, December 10th D-star presentation.
 - 4.4 Formation of Committees: Facilities Committee, Event Committee, such as Field Day, Museum Ships and any other event perhaps having a club project. Membership Committee will be in charge of: License classes, Meet and Greet, retaining members, social media, membership participation and VE services.
 - 4.5 The Houston Ham Radio Club Extravaganza is being tabled for now.

New Business

- 5.1 Banquet: It will be at Maggiano's Little Italy on January 15 Friday night with getting a larger room. The speaker has not been confirmed yet but will probably require air fare, room and rental car.
- 5.2 Memorial Service for Bill Stone will probably occur in September on a Saturday afternoon.
- 5.3 Jerry Mueller brought up concerning the Balloon Launch group and contributing \$100 for this year's event. A motion was made and passed to contribute \$100 to the Balloon Launch Group for this year.
- 5.4 It seems that a donation for use of the Fire Field in 2014 was returned because it was made out to the wrong group.
- 5.5 John Chavin brought up Astronomy Day that will have a live HF station, which is the last weekend in October. A motion was made and passed for a \$50 donation for Astronomy Day.
 - 5.6 Mini Makers Faire: This year that event will be at George R Brown on November 14. Exhibitors will only get two or three free admissions. Attendance last year was 3,000 and it is expected to be three times as much. More information needs to be obtained and this will be discussed at a future Board meeting.
 - 5.7 A future event will be the South East Texas Regional Advisory Council. 2500 professionals will attend this. Promoting ARES type work with Amateur Radio with a special event station and this will be promoted to the national level. There is an opportunity to involve the BVARC name. This will be discussed further at a future Board meeting.

Meeting adjourned at 11:06 AM

Submitted by Recording Secretary, Michael Monsour ACØTX





The Radio Holel- The Antenna - Part 7 by W5RH

Antenna Shortening – Let's Get Loaded with Coils and Hats

Sometimes an antenna is too long to fit the space we have available. Take an 80 meter dipole for instance: it is about 135 feet long. Stretched horizontally it is pretty darn long for some smaller city lots, but that is what it takes to get on 80 meters. Is there anything that can be done about the length? Sure, you can bend it around corners, you can bend the ends down toward the ground, you can zig zag it or you can load it. Load it? *(See Note 1 for a great example) OK, but, just what is loading?

A dipole is typically ½ wavelength long, which is 468/FMHz= length in feet. But look at it another way, the dipole is 180 "electrical" degrees. If we shorten it, the feed point will exhibit "Capacitive Reactance -- Xc" along with a reduced resistive value of the feedpoint. If we make it longer than ½ wl, the feedpoint exhibits Inductive Reactance - Xl along with an increased resistive feedpoint value. You can cancel the reactance by, judiciously, applying the opposite type of reactance. For example, if the antenna is short and exhibits capacitive reactance, you apply inductive reactance (a coil) along the element. If it exhibits inductive reactance (too long) you apply capacitive reactance (a hat) at the end of the element. Antennas that are short are far more popular than antennas that are too long, so we'll use a short antenna as the limited space example.

Look at the current distribution on a standing wave antenna (Fig. 1)

(I talked about standing wave antennas back in TRH # 3) The current distribution is sinusoidal, or close to it. The current is largest

in the middle, so the radiation is strongest from the middle portion of the Hence, the "83/63 Rule" (Fig 2) which is "on a full size dipole, 83 percent radiation from a dipole is performed by 63 percent of the antenna length". wanted to shorten the antenna it would be best to do it where the current is – at the ends. Some antennas do this by adding "capacitive hats" at the ends, but physically easier is placing coils in the higher current portions of We've all seen the "Bug Catcher" mobile antennas with their large coils way up the mast. This is a perfect example of coil loading. Without that up a significant amount of electrical degrees, that mobile antenna would long on 20 meters. A bit much for putting on a car.

Standing waves of voltage E and current I

83 %

Current

of the So, if we not so strong element the element. about half coil making be 16 feet

antenna.

Loading is a fairly straight forward concept once you get the basic rules principles down. My suggestion is that you have a look at some mobile

Length and installation

articles or even read about the multi-band dipoles that some folks sell that use loading coils for making low band antennas shorter. Loading can all be calculated with the charts in the ARRL Antenna Handbook or you can model it in EZNEC. Just a few ways to get you up to speed with understanding loading.

So, that is it in a nutshell. Inductive loading – 'Coils', capacitive loading – "Hats"....the two well known methods to load an antenna. For alternate loading methods you can Google "Linear Loading" or even "CCD Antennas" for a couple of bazaar methods to load a wire. Have a look at a presentation "Practical Application of Loading Techniques" a PDF on the www.BVARC.org Tech Articles page or read the 3 part treatise on loading in the BVARC 2004 January, May and September newsletters. It is tough to explain somethings in one page and loading is one of those things.

* Note 1 – The LKJ Wednesday Night Special – www.BVARC.org Tech Articles

Next time.... Getting All Choked up about Feeding and Matching

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





Editor's Note: Due to the large amount of material for this issue of the BVARC Newsletter, some articles had to be started in the middle of the page and others required smaller font than usual. More than the normal liberties needed to be taken with reformatting.

2015 Officers:

Vice President/ Acting President Michael Hardwick, N5VCX n5vcx@att.net

Corresponding Secretary Stephanie Vessey K5SFV K5SFV@att.net

Treasurer Robert Tomlinson, N5JSL rbtswim@gmail.com

Recording Secretary: Michael Monsour, ACOTX msircg@gmail.com

2 Year At-Large Board Jerry Muller, K9GEM gmuller885@aol.com

2 Year At-Large Board Member B: Scott Medbury KD5FBA smedbury@windstream.net

1 Year Past President Board Member Darrell Kirk KC5JAR darrellk us@yahoo.com

Club Happenings:

General Meeting

Second Thursday each month, 7:30 PM 2511 Eldridge Rd, Sugar Land, 77478, Eldridge Park Conference Center (Check page 1)

Board of Directors Meeting

First Thursday of each month, 10:00 AM (For Sept., check website) Bayland Park Community Center Bayland Park, 6400 Bissonnet,

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 jwm@hal-pc.org

Eating Schedule

See in adjacent column.

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

Public Service Net Monday night on 146.94 (167.9) at 8:00 PM

BVARC EATING SCHEDULE

Advertising in the BVARC Newsletter
Rates are as follows; \$25 per montly for ½ page, \$125 for six months

and \$250 for one year. The rates for a full page are as follows; \$50 per

month, \$250 for six months and \$500 for the year.

SATURDAY MORNING BREAKFAST
IHOP, 7:00a.m., SW Freeway inbound service road, near Kirkwood.

OTHER HAM GROUPS:

WEDNESDAYS – WEDNESDAY LUNCH BUNCH LUBY'S CAFETERIA, 10:30a.m. to 12:00Noon +, South Post Oak Road, just south of the I-610 Loop in Meyer Park Shopping Center.

WEDNESDAYS – AMSAT & QRP GROUP PAPPAS BARBECUE. 11:30a.m., SW corner Westheimer & Gessner.



Hamfests

(within 200 miles of Houston)

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

10/03/2015 | HamEXPO

Location: Belton, TX
Type: ARRL Hamfest

Sponsor: Temple Amateur Radio Club **Website:** http://www.tarc.org/hamexpo/

10/31/2015 | South Texas Hamfest

Location: Aransas Pass, TX

Type: ARRL Hamfest

Sponsor: South Texas Hamfest Association

Website: http://www.southtexashamfest.org

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



Monthly Publication of the Brazos Valley Amateur Radio Club. Serving Amateur Radio for Southwest Houston and Fort Bend County Club Call sign – KK5W

BVARC Website: http://www.bvarc.org
Editor: John Chauvin, K5IZO, k5izo@yahoo.com

Production Team: Cameron Mitchell, K5CAM, k5cam@arrl.net

Brazos Valley Amateur Radio Club (BVARC) was organized in 1977, 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 the Southwest Houston and Fort Bend County area. BVARC is a Non-Profit Corporation classified by IRS as 501-©-(3).

Today **BVARC** is truly a general interest amateur radio club with an impressive record of public service. The American Radio Relay League (ARRL) has recognized the club's commitment of service with the coveted status of Special Services Club. We are proud of our members who represent 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. Club meetings are held on the 2nd Thursday of each month at 7:30 p.m. at the Eldridge Park Conference Center, 2511 Eldridge Rd, Sugar Land, 77478,

.. General membership dues are \$25.00 per year, with student dues \$10.00 per year, additional family members \$5.00 per member per year and life membership \$250.00.

BVARC also administers amateur radio license exams on the 2nd Tuesday of each month at 7:00 p.m. at the Houston Community College's Scarcella campus in Stafford. A Public Service Net is held each Monday at 8 p.m. on the 146.94 (minus offset, PL 167.9 tone) repeater & a rag chew net is held each Wednesday at 7 p.m. on 3910 KHz +/- 3 KHz.

To obtain information about joining **BVARC** or its activities, contact the club's "Elmer," Ross Lawler, W5HFF at 281-342-3340 or w5hff@yahoo.com or see the BVARC website: www.bvarc.org

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September General Membership Meeting – September 10

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