



BRAZOS VALLEY AMATEUR RADIO CLUB



AMATEUR RADIO FOR SOUTHWEST HOUSTON AND FORT BEND COUNTY

JUNE 2016

VOLUME 40 ISSUE 6

BVARC GENERAL MEMBERSHIP MEETING, Thursday, June 9

Don't miss the June General Membership Meeting on June 9 at the Masonic Lodge in Sugar Land, 421 Eldridge Rd, Sugar Land, TX 77478

During our regular monthly General Membership Meeting at the Sugar Land Masonic Lodge, We'll get a comprehensive recap for Museum Ships Weekend and savor the sea salt air. Maybe the weekend will net a few memorable contacts.

Also on tap will be Mike and Mike relating developing plans for the ARRL Field Day activities held the last weekend in June.

And finally, I plan a brief (as in short) demonstration of sound card setups for operating digital modes. Still working out the details, but for those of you who are considering a new mode of operation, you should be able to get some useful information from this pitch.

About the May Meeting

Our very own Ron Litt (K5HM) did a fine job of de-mystifying the Art of the QSL at the May General Membership Meeting. You don't need to take my word for it, as a club video should be on-line by the time you receive this newsletter. When you view it give a Thumbs Up.

Thank you Ron, and enjoy your new found YouTube fame.

Jon KF5TFJ



June BVARC BOD Meeting

Due to scheduling issues with Museum Ships Weekend, the monthly BVARC BOD meeting will not be held on Saturday June 4th. Instead it will be held as a conference call on June 2nd at 7 pm. The dial-in information will be posted on the BVARC web site on June 1st.

Field Day Location Moving for 2016

Due to scheduling conflicts, the tri-club 2016 BVARC/ ECHO/TDXS Field day will not be held at the Fire Training Field in Richmond. This year it will be held at the Pecan Grove Volunteer Fire Department Station #1 on Pitts Road just North of Hwy 90A. Check the BVARC web site for more Field Day information over the next few days.

Mike, N5VCX

The Prez Says

Prez Says

Summer is just around the corner and that means three things – Museum Ships Weekend, Irving Ham-Com and Field day.

Museum Ships Weekend is coming and you should make sure you come down to Seawolf park and help out. Contact Mark Janzer at 832-875-0526 and let him know what you would like to do to help with this year's MSWE. There will be availability for overnight accommodations on the USS Stewart for a few people but you have to coordinate this with Mark

Ham-Com is just a few weeks away and it is one of the biggest amateur radio functions in the state. We should try and attend and support Ham-Com which supports amateur radio. Hope to see you there.

Field Day is just around the corner and Mike N5MT and myself are hard at work on the preparations it. Unfortunately the location will be different this year. This year is will be held at the Pecan Grove Volunteer Fire department station on Pitts Road. Things will be a little tight this year but we should have a great time. To make things interesting, all the stations will be set-up at the fire station and the antennas will be set-up in Pecan Grove Park. If you would like to help please make sure you contact Mike, N5MT or myself and let us know what you would like to do. Keep checking the BVARC web site for more information.

And for everyone that is not aware about the BP MS150 this year, it was still a huge success even though the second day was cancelled. They had approximately 10,000 riders and over 4,000 volunteers. Over 100 amateur operators supported the communications on the event over the two days. I really want to thank everyone for their hard work for the time they worked on the ride.

Hope to see everyone at the general meeting on the 9th.

73,

N5VCX



Museum Ships Weekend June 3-5 2016

From June 3 – 5, the historic ships at Seawolf Park on Pelican Island, in Galveston, will come to life as part of an annual worldwide event to commemorate their service. The radio room aboard the destroyer escort USS Stewart will be manned by BVARC hams communicating from the Stewart along with the nearly one hundred other historic vessels in the United States, and around the world. Adjoining is the submarine USS Cavalla, which provides an extra claimed ship QSO, for this location. The public may come visit the ships that weekend and observe the action (and amateur radio) during normal Seawolf Park hours of operation.

Two operating positions are planned with SSB and CW modes available. PSK might also be used. Those members volunteering for overnight shifts will be able to sleep in the ship's officer's berth.

Check out the link below for more information on the event and the list of activated ships:
<http://www.nj2bb.org/museum/>

To sign up for a shift(s) or obtain more information, contact Mark Janzer – K5MGJ at K5MGJ@YAHOO.COM

The Brazos Valley Amateur Radio Club is grateful for the enthusiastic support of the Cavalla Historical Foundation and the Galveston Park Board of Trustees for their permission to be aboard the vessels and use of the park facilities. We look forward to continued future activity. This allows us, in our own way, to honor those who served their country at sea and to support Galveston Parks.
Mark, K5MGJ

**Results of the May 10th
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, May 10, 2016 at HCC's Scarella Science & Technology Building in Stafford, TX.

MEMBERS OF THE VE TEAM:

Richard Goldy, K5GOL	Mark Janzer, K5MGJ	John Moore, KK5NU
George Ontko, KM5VP	Randy Pugh, AA5OA	

Three examination elements were administered during the evening to three applicants. One new Technician class license and two upgrades to Amateur Extra were attained, with the total number of elements passed being 3. The overall "pass rate" for the evening was 100%.

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

William E. Cordell	- WA5KXG	- Amateur Extra
Michael T. Dome	- {KG5NOV}	- Technician
Dominic J. Laven	- KE5GIN	- Amateur Extra

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 Scarella Science & Technology Building for making these excellent classroom facilities available to us for our exams each month.

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**Brazos Valley Amateur Radio Club
Board of Directors Meeting Dates and Times for 2016**

June 4 th , 2016	9 to 10:30 am	BOD meeting	Bayland Park
July 9 th , 2016	9 to 10:30 am	BOD meeting	Bayland Park
August 6 th , 2016	9 to 10:30 am	BOD meeting	Bayland Park
September 3 rd , 2016	9 to 10:30 am	BOD meeting	Location TBD
October 8 th , 2016	9 to 10:30 am	BOD meeting	Bayland Park
November 5 th , 2016	9 to 10:30 am	BOD meeting	Bayland Park
December 3 rd , 2016	9 to 10:30 am	BOD meeting	Bayland Park





Minutes of the May 7th, 2016 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 9:15 AM on May 7th, 20156, at Bayland Park Community Center, 6400 Bissonnet, Houston 77074. Attending were: Mike Hardwick N5VCX (President.), Donovan Balli KD5BDZ (Treas.), Michael Monsour ACØTX (Rec.Sec./Quart.), Steve Friedman KF5YYZ (Cor. Sec.), Scott Medbury KD5FBA (2yr At-Large Dir), Jerry Muller K9GEM (1yr At-Large Dir.), Jo L Keener KE7NSB (2yr At-Large Dir), Jon Noxon KF5TFJ (Vice President), Cameron Mitchell K5CAM, Ron Litt K5HM (Radio Sport), Jim Burrough N5DTT (QSL manager)

Emergency Business:

- 1.1 There was discussion concerning jammers on the repeater and how to deal with them and what was done in the past that eliminated the problem.

Reports:

- 2.1 A motion was made and passed to accept the April Minutes.

2.2 A motion was made and passed to accept the Treasurers report. The final refund check from the fairgrounds has not been received yet.

Old Business:

3.1 Hamfest stats: Attendance is up by 25%, income was down, costs were up because of more buildings that needed more security, admission and table sales income was down, tail gate income was down. Raffle income was up. Donation table was up.

3.2 The Hamfest planning meeting will start in July all the way through March.

3.3 There was discussion regarding what the 2017 Hamfest budget should be like.

3.4 Museum Ship Weekend Event is June and Mark Janzer K5MGJ will be the coordinator and the event will be inside the radio room of the Stewart.

3.5 A motion was made to approve up to \$600 for MSWE budget.

3.6 Field Day: Coordinators are Mike N5MT and Mike Hardwick N5VCX. There will be a man lift for the antenna erecting. Last year the check donation to the Fire Field was returned, there was a suggestion to donate in food.

3.7 A motion was made and passed to approve up to \$1000 for Field Day budget.

3.8 May meeting: The Art of QSLing.

3.9 June meeting: Field Day

3.10 Masonic Lodge contract, there seems to be new lights that will be installed. Plumbing needs to be repaired. Need an extra key Handicap spots needs to be expended in front of the Masonic Lodge.

New Business:

4.1 In June the first two weekends are MSWE and Ham-COM that conflicts for a Board meeting. Thursday evening on the 2nd of June, 7pm Thursday evening via teleconference.

4.2 A suggestion was made to have the Skeeters mascot come out for Field Day, for publication and publicity.

4.3 Membership renewals. In the past a certificate and badge were given out to Life members. There was suggestion to acknowledge new or renewal memberships. New members should be announced at meetings and also for upgrades.

4.4 Ron Litt K5HM announced that he secured the NØD call sign for the solar eclipse event in August 21 2017 and requests support from the club.

4.5 Jim Burrough N5DTT, QSL manager, said he will utilize Logbook of the World (LOTW) as the database.

Meeting adjourned at 110:32 AM

Submitted by Recording Secretary, Michael Monsour ACØTX





A Great Field Trip

Ira Liebman, the voice of the Sugar Land Skeeters, hosted seven intrepid members and friends who got the royal tour of the ESPN broadcast facilities at Constellation Field before the Sugar Land Skeeters game on a rainy Saturday evening before the start of the game. A total of 15 were in attendance for the game with BVARC and TDXS members .



73.... Scott KD5FBA



**Where in the World is . . .
The Dry Tortugas (K4T)
IOTA NA-079**

Proving that you do not have to go halfway around the world, the recent DXpedition to the Dry Tortugas is a case in point. Bet you thought the next stop after Jimmy Buffet's Key West locale was Cuba? Wrong Dick Tracy!

A small group of islands lying in the Gulf of Mexico at the end of the Florida Keys, the Dry Tortugas are jointly claimed by both the U.S. and the Conch Republic. So no currency or licensing issues.

The keys are low and irregular. Some keys have thin growths of mangroves and various other vegetation, while others have only small patches of grass or are devoid of plant life. In general, they rise abruptly from relatively deep water. They are continually changing in size and shape.

The Tortugas Atoll has had up to 11 islets during the past two centuries. Some of the smaller islands have disappeared and reappeared multiple times as a result of hurricanes. Today, they constitute the Dry Tortugas National Park. The park can be reached by ferry or seaplane from Key West. Limited camping is available.

The main feature of the islands is Garden Key, which houses Fort Jefferson. The fort started in 1846, was never completed. During the Civil War, it was used as a prison.

The first European to see the Dry Tortugas was Ponce de León in 1513. The preponderance of sea turtles caused him to refer to the areas as the "Tortugas" (turtles). They are called *Dry* owing to the absence of surface fresh water on the island.

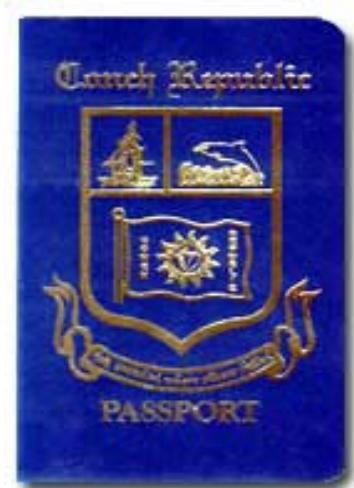
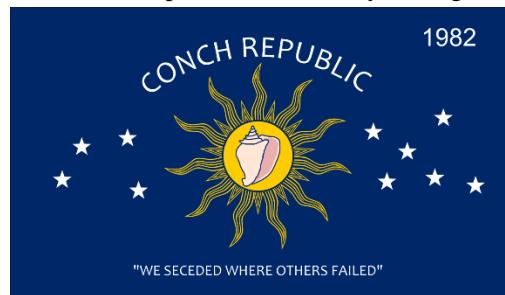
In a historical footnote, in 1995, when President Clinton shut down the federal government, the National Park Service closed access to the Dry Tortugas Park. So important was the tourist revenue from park visitors, the Mayor of Key West declared the Dry Tortugas a possession of the Conch Republic. The Republic was created in 1982 by the "secession" of the Florida Keys in protest to U.S. Border Patrol roadblocks that were hindering tourist traffic.

This year a team of six hams with proper documents took their equipment, food, and all supplies to operate on Dry Tortuga Island May 6-9, 2016. If you blinked you missed it.

This DXpedition was something special for DX chasers. Since the Dry Tortugas are a National Park, special designation from the ARRL, National Parks on the Air and World Wide Flora & Fauna were added to the NA-049 and a rare grid square, EL84np as well.

According to Rick K4JTT, "Our purpose was to activate a lighthouse and IOTA for other hams to contact. We'll have fun, give other hams a chance to get credit for a new Islands on the Air (IOTA) credit, have fun, test out our skills in setting up portable stations, have fun, and challenge our operating skills. Oh, did I mention it is to have fun?" I guess they had fun.

Reporting from the Dark Side,
Ron, K5HM



The Purpose of Field Day and Amateur Radio

This is some information that was printed a few years ago about Field Day. It describes why we have the radio privileges we do and what we should do to support those privileges. It may be great to just talk on the radio during drive time but amateur radio is here to support the community in several ways such as ARES, Emergency communications, Disaster communications, RACES, Public Welfare communications.

There are several non-technical reasons for amateur radio. The government, both US and internationally, made the decision in 1934 to allow individuals to operate radio transmitting equipment as a hobby during none emergency times for the availability of having communications for emergencies. For the folks that have never seen any part of the concerning amateur radio, here is the first part explaining the basis and purpose of amateur radio.

Code of Federal Regulations
Title 47, Volume 5
TITLE 47--TELECOMMUNICATION
PART 97--AMATEUR RADIO SERVICE--Table of Contents

Subpart a--General Provisions

Sec. 97.1 Basis and purpose.

The rules and regulations in this part are designed to provide an amateur radio service having a fundamental purpose as expressed in the following principles:

- (a) Recognition and enhancement of the value of the amateur service to the public as a voluntary noncommercial communication service, particularly with respect to providing emergency communications.
- (b) Continuation and extension of the amateur's proven ability to contribute to the advancement of the radio art.
- (c) Encouragement and improvement of the amateur service through rules which provide for advancing skills in both the communication and technical phases of the art.
- (d) Expansion of the existing reservoir within the amateur radio service of trained operators, technicians, and electronics experts.
- (e) Continuation and extension of the amateur's unique ability to enhance international goodwill.

As you can see, the first item for the purpose of amateur radio is on emergency communications. Even with cell-phones and the Internet, amateur radio can still provide a very reliable source for emergency communications. With the products today, amateur stations can be set up anywhere and provide a never-ending stream of communications for disaster and emergency communications. There is only problem, the amateur operator.

If we are to be a value to the public, we have to be prepared. Whether prepared through equipment or through operational capabilities, we need to be prepared. Do you know how to operate your radio on more than one or two channels? Can you change your PL tone without getting the manual out? Do you know where other repeaters are in your area? Can you take your equipment and setup operations in different locations? My feeling is if you cannot do any of the things that I have listed, you cannot successfully help during an emergency situation.

Field day is just a few weeks away. This is the time that we should work on being prepared for emergencies and able to help out in a moments notice. If you want amateur radio to survive, help out on field day. Come to the general meeting on the 9th and find out more about Field Day. With everyone working together the hobby will continue.

Mike, N5VCX

The Radio Hotel - Antenna Efficiency

By Rick Hiller -- W5RH

Pete, KD5QPX, and I were enjoying lunch at What-a-Burger while discussing various topics. One topic being his new copy of EZNEC 6.0 recently supplied by Ol' Saint Nick. Pete had been using another modeling program, but they went out of business. He needed an alternate modeling application and I had suggested EZNEC. At lunch, Pete asked the long time EZNEC user, me, where EZNEC displays the modeled Antenna Efficiency. I responded that EZNEC does not display it as a simple value. He then proceeded to show me that his older modeling program shows you a discrete "Calculated Antenna Efficiency" value. Nice capability. EZNEC does it a bit differently, but first.....

What is Antenna Efficiency? To plagiarize from the EZNEC User Manual—"Antenna Efficiency is defined as the fraction of the applied power which is radiated. The remainder of the applied power is lost as heat in lossy parts of the antenna structure. System efficiency can also include the effect of ground, feedline, and matching network loss." Our desire is to have all of the power put into the antenna system to be radiated. If any power is lost due to heat or coupling with the surrounding environment, you want that power loss to be minimal.

Efficiency is simply Power Radiated versus Power Not Radiated. Power Radiated is what is actually launched into free space and Power Not Radiated is that power lost due to the antenna wire resistance (heat), lost thru a counterpoise or the ground itself used for a verticals return currents (actual earth or a car body if mobile) and other environmental type losses like coupling to your house siding, etc. From a practical standpoint, do everything you can to reduce the amount of Power Not Radiated, thus improving the efficiency. Use quality antenna wire, use the appropriate coax for your power level and frequency, use good quality insulators, ensure good connections on the TL/coax to the antenna and, lastly, locate your antenna as much in the clear, away from surrounding objects, as you are able. If you are using a vertical, the ground/counterpoise side of the antenna system is VERY important. Maximize your wire on the ground. Recent studies point to "on ground" (or even elevated) insulated wire radials being the preferred deployment. A poor vertical ground system reduces the antenna efficiency, thus reducing the strength of the radiated field, but, note, not the shape of the far field antenna system generated pattern.

You can measure antenna efficiency, albeit difficult, and one of the current ways to measure it is with a Wheeler Cap. However, doing so at 7 MHz, or any HF frequency would be a task. Why? Google: Wheeler Cap to read about it. "Antenna under Glass" might be a layman's description. So it might be best to stick with the modeling estimates.

Back to EZNEC: the way to model for efficiency within EZNEC is in 5 steps: 1) set all of the loss type parameters to zero (i.e. wire loss, ground type, etc.); 2) run the model calculation and see the results on the 2D pattern/gain plot. Then, 3) set all the loss parameters to their normal lossy settings; 4) run the model calculation again; and, finally, 5) compare the 2D pattern/gain results of this second run with the first run. Note the dB difference of the radiation pattern maximum gain between the two runs. This will give you a reasonable indication of efficiency. RF Café has a chart noting dB loss versus efficiency – go to:

<http://www.rfcafe.com/references/radio-craft/decibel-level-gain-may-1936-radio-craft.htm>

Another way to look at efficiency within EZNEC is to note the Average Gain Figure, but I will leave you to research that on your own, as it requires a further understanding of the use of EZNEC, which requires much more room to explain than I have been allocated by Sr. Editor--IZO. A full explanation of both of these methods of efficiency modeling can be found in the EZNEC manual, available on line.

GL ES 73 DE W5RH Enjoy your hobby.

Next time.... Antennas, et cetera; in QST Magazine

*The purpose of **The Radio Hotel** is to give you a practical kick start 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.*

BVARC Rag Chew Net

Below is the BVARC Rag Chew Net check-in information:

04/27/16, K5LKJ (NCS), K5IZO, W5TKZ, KF5TFJ, W5TOM, AA5OA, KC5JAR (Katy), K5LJ, W5RH, W5HFF, KG5BMS, AF5T, K5GJQ, AA0ST (Dickinson), K0NM (RCS)(South Beach, FL), WB4KTF, WB9FOP (Katy), WA5KXG

(18 Check-Ins) Solar Cycle 24: SFI = 90, SN = 65, A = 6, K = 3

05/04/16, K5LKJ (NCS), W5TOM, W5TKZ, K5IZO, AA0ST (M)(Dickinson), W5HFF, K5LJ, KD5CDM, KF5ONT, W5RH, KF5YYZ, AF5T, N5EKW (Katy), KF5TFJ, AA5OA, KF5BOD (Piedmont, OK), KC5JAR (Katy), KB4KTF (M).

(18 Check-Ins) Solar Cycle 24: SFI = 90, SN = 57, A = 10, K = 1

05/11/16, K5LKJ (NCS), W5TOM, KF5TFJ, W5TKZ, W1BG (Katy), K5IZO, KF5YYZ, W5HFF, KE5OBY (R), AA5OA, KF5QQA (Pearland), AF5XL, N5WLG (Ruston, LA), WA5KXG, AF5T, W5RH, N5EKW (Katy), KF5PHA, WB4KTF.

(19 Check-Ins) Solar Cycle 24: SFI = 91, SN = 70, A = 16, K = 1

05/18/16, K5LKJ (NCS), W5TKZ, KF5TFJ, KE5OBY (R), AF5T, W5TOM, W5HFF, AA0ST (Dickinson), W5RH, WC6CQO (Nederland), KC5JAR (Katy).

(11 Check-Ins) Solar Cycle 24: SFI = 102, SN = 36, A = 13, K = 1

(M) = mobile (P) = Portable (R) = Relay (RCS) = remote controlled station (T) = telephone check-in

Come join in the conversation each Wednesday evening.

Regards. John K5LKJ



BVARC Monday Night Public Service 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 Rick, w5rh, if you are interested. Here are recent check-ins with control-ops:

2/15 - 23 - Ron, k5hm	3/21 - 19 - Ron, k5hm	4/25 - 28 - Clint, kf5hdf
2/22 - 22 - Clint, kf5hdf	3/28 - 29 - Clint, kf5hdf	5/2 - 28 - Dave, n5ekw
2/29 - 22 - Terry, k5pgf	4/4 - 27 - Rick,w5rh	5/9 - 31 - Steve, kf5yyv
3/7 - 17 - Rick, w5rh	4/11 - 20 - Steve, kf5yyv	5/16 - 24 - Ron, k5hm
3/14 - 23 - Steve, kf5yyv	4/18 - 26 - Ron, k5hm	5/23 - 23 - Clint, kf5hdf

BVARC QUICK STATS

Date	Members	Newsletters	Life Members
5/25/16	206	206	66

BRAZOS VALLEY AMATEUR RADIO CLUB

This newsletter is a monthly publication of the Brazos Valley Amateur Radio Club. For a full listing of officers and information about BVARC, please go to www.bvarc.org. Detailed information will be published in the newsletter every 3 or 4 months. Similarly, the "Eating Schedule" will be published every 3 or 4 months unless there is a change.

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

Club meetings are normally held on the 2nd Thursday of each month at 7:30 p.m. at the Sugar Land Masonic Lodge, 421 Eldridge Rd, Sugar Land, 77478. Check the above website for any possible changes.

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 281-701-7602 or see the BVARC website: www.bvarc.org

Other contacts include:

President:, Mike Hardwick, N5VCX, n5vcx@att.net
Newsletter Editor, John Chauvin, K5IZO, k5izo@yahoo.com

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**BRAZOS VALLEY
AMATEUR RADIO CLUB
P.O. BOX 2997
SUGAR LAND, TX 77487-2997
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FIRST CLASS POSTAGE

Museum Ships Weekend – Friday-Sunday, June 3-5.
BVARC General Membership Meeting – Thursday, June 9
Field Day – Saturday-Sunday, June 25-26

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