



BVARC BEACON



Newsletter of the Brazos Valley Amateur Radio Club
AMATEUR RADIO FOR SOUTHWEST HOUSTON AND FORT BEND COUNTY

MAY 2019

VOLUME 43 ISSUE 5

BVARC MAY GENERAL MEMBERSHIP MEETING

Thursday, May 9th, 2019 7:30pm, 421 Eldridge

30 minutes before the general meeting (at 7:00 pm) we'll have an introductory training session on N1MM computer logging with an interconnected K3 transceiver - conducted by Nizar Mullani (K0NM). Not only will this be preparatory for Field Day but is also applicable to the upcoming Museum Ships Weekend Event.

In addition to our usual comradery, the featured presentation will consist of several topics: A 10 minute presentation on the Museum Ships Weekend Event. This event is bigger and better than in past years. A detailed article on this event is included in this issue. A presentation on various types of HF antennas. A brief update on Field Day. A more comprehensive 10 minute presentation will be given on Field Day at the June meeting.

There might be additions and variations. To get the latest agenda, check the BVARC website a few days before the meeting.



REPORT ON THE MARCH GENERAL MEMBERSHIP MEETING

Report on *Arduino 101*

We had a great turnout for *Arduino 101*, a club meeting on April 11 unlike most have been. This one brought out few members who have been absent far too long, and we hope you will continue coming to the meetings and other club Events. This was a learning experience for the 30 or so members who came, not to mention the Arduinos that went home with new owners. A SUCCESS due to the ACTIVE PARTICIPATION of the CLUB MEMBERS.

Here are a couple of photos of the meeting, courtesy of Travis Burgess, K5HTB.



The Prez Says

June is just around the corner and that means three things – Museum Ships Weekend (MSWE), Hamcom and Field day. These events are some of the biggest amateur radio functions in the state and we should try and attend and support them. If you can make sure you sign up to help at MSWE or Field Day and try to attend Hamcom. Hope to see you at one of these events.

Museum Ships Weekend will be held at Seawolf Park in Galveston again this year. If you are interested in helping or joining the event, contact Mark Janzer, K5MGJ at k5mgj@yahoo.com and let him know you are interested. Operations will be set-up on the USS Stewart radio room with a couple of new antennas. If you are interested, there may even be a few places to spend the night on board the ship Saturday night. Drop Mark an e-mail and let him know you are ready to “ride the waves”.

Field Day is just around the corner after MSWE. Again this year, we will have four clubs involved in the event – BVARC, KARS, TDXS and ECHO. We will be set-up with a several huge antenna arrays thanks to Bill Cordell, W5VOM. Make sure you make it out to Duhacsek Park Community Center in Sugar Land. We will have plenty of room for field day operations again with at least 8 operating positions and a GOTA station. So make sure you sign up now (and sign the sign-in sheet) for field day. The June BVARC meeting will have more information on the event.

Don't forget the other club activities coming up: the ice cream social in August, the elections and Chili supper in November and home brew night in December. There has been talk about bringing back BVARC's weekend camping trip for September or October. If you have any ideas for programs or events for the club, drop Jon Noxon, KF5TFJ and let him know.

Donavan Bali had a wonderful start with the building/construction program last month. Beginning in July (and possible sooner) BVARC will start having 2 Saturday's per month for people to come out and working on their project or learn more about kit building. Check the web site or the newsletter for more information in the coming months.

There will be a change in the clubs meeting location in the coming months. Keep checking the web site and the newsletter for more information.

Hope everyone can make it to the general meeting on the 9th.

73,

N5VCX

Museum Ships Weekend Event - *A greatly expanded event.*

7 PM, Friday, May 31 to Sunday afternoon, June 2.

- **Were you in the Navy?**
- **Are you a Vet – any branch?**
- **Have you been to sea (not including cruise liners)?**
- **Are you a history buff?**
- **Are you patriotic?**
- **Do you like to eat? Check out our spread!**
- **Would you like to be on the “good end” of an operating pileup?**
- **Do you like camaraderie with fellow hams in a relaxed, comfortable and scenic environment?**

If so, **you will really enjoy** participating and operating +on Museum Ships Weekend Event from 2 ships in Galveston - the Submarine USS Cavalla and the Destroyer Escort, USS Stewart. A third station will also be set up on the Stewart to “activate” the Selma, a 1919 concrete oil tanker scuttled in sight of the Stewart. There will possibly be a 4th station. You'll be able to operate SSB or CW.



USS-Cavalla, SSN-244



USS Stewart, DE-238



SS Selma

If you haven't attended before, **you really want to “make it happen” this year.** You are guaranteed to have an enjoyable and memorable time. If you have attended previously or on a “workday”, you need no convincing, especially with our expanded event.

It is **only a 1-hour drive** (off peak) from Meyerland or Stafford. Also, carpools can be coordinated.

Amateur radio operators around the world set-up on, or in sight of, a ship museum or ship's memorial and hams worldwide make contacts with as many of them as possible. **More than 100 ships participate.** Participant hams that achieve 15 ship QSOs earn a nice certificate. BVARC has its own special QSL card for this event as well.

Because the 2 stations activating the Stewart also activate the Cavalla, contact with only one of them counts as a “twofer” (2 ships for one contact). Demand for these makes operating **our stations feel like being on a DXpedition fielding the pileups.** Because there are occasional slower times, and because the Selma is not a twofer, many opportunities exist for those who wish to operate at a more relaxed pace.

You will be fed well! A “super feed,” compliments of BVARC, takes place around 6PM Saturday. It will likely be catered with legendary Leon's World Famous Bar-B-Que. Several other meals, some contributory, some compliments of BVARC, as well as ongoing snacks and drinks are provided.

You can also **sleep on-board** the air conditioned Stewart Friday and/or Saturday night. Please RSVP so we can provide the Museum a head count of over-nighters. Bring a bedroll and a pillow for the bunks.

The website for the entire international MSWE event is at: <https://www.qsl.net/w/wa2tvs/museum/>
Check for more info, directions and updates on the BVARC event at: <http://bvarc.org/home/museum-ships/>

Contact Mark Janzer (see back page) to participate, etc.

EAT - DRINK (SRI, no adult beverages) - and MAKE QSOs.

The Radio Hotel Small Antennas – Mag Loops Part 2

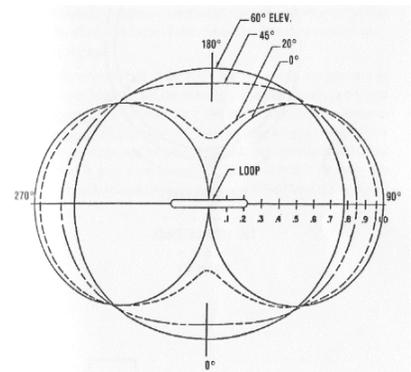
by Rick Hiller–W5RH

First off, I apologize for the delay in getting Part 2 into print. A few important family issues had to be handled, but now I am back in the Radio Hotel writing saddle again.

Managing the feed Z of such a small antenna. So how does an antenna that is $1/10^{\text{th}}$ of a wavelength long, at the operating frequency, actually work? As you know, an antenna is (most times) a resonant circuit. That means it has no reactive component in its' radiation resistance. We Hams know that resonance is a short lived characteristic especially on the low bands, so we will typically use a ATU (antenna tuner) to provide opposite reactance to the reactance presented at the feed point of our too short or too long antenna. The small Mag Loops do the same thing. They are short and have a massive reactive component. A lumped reactance (x C) is used to bring the loop into resonance. At that point it can be matched to and fed power.

Radiation from such a small antenna. Take a $1/2$ wl dipole operation as a reference. The charge (EMF – sinusoidal voltage) is fed into the feed point and this varying voltage wave spreads out over the length of the dipole element and generates a “standing wave” of voltage and a resultant current. Now, that dipole is $.5$ of a wavelength – 180 degrees. Take a $1/10^{\text{th}}$ wl portion of that dipole, 36 degrees, and isolate it and look at the varying voltage of the fed charge voltage. The charge around the loop is varying but varying as an entity – close to having equal charge potential around the loop. It's almost pulsating, if you can visualize a slow motion version of the changing charge. This pulsating charge generates an associated pulsation current and this current causes the transfer of the radiation of our signal into the atmosphere. The strength of the radiation field varies with the voltage charge fed to the antenna loop. Remember, this is taking place at 3.75×10^6 times a second, so, in reality, that radiation is a constant field strength when sampled over time.

Radiation patterns from such a small antenna. Ted Hart's 1982 “Loop Antenna” graphic, shown right, outlined the radiation patterns of the loop at various elevation angles. Max radiation is in-line with the loop plane and at a 0 degrees angle of radiation. The caveat is that the radiation strength is 6 or more dB down from a normal standard $1/2$ wl antenna. On receive this lower field strength can be corrected by using a pre-amp. But on transmit, applying a high power amplifier is asking for trouble, as even with a barefoot (100w) rig, the circulating currents generated in the loop conductor can be in the range of 30+ amps.



So why use such a small antenna? It is slightly difficult to build, but once done, it makes for a backyard, neighbor/wife friendly antenna system. You might have to build 2 in order to cover the 80 thru 10 meter bands. It can be placed near the ground, as it has no height above ground requirement in order to lower the radiation angle for DX, as a dipole does. A rotor can be used to get all degrees of the compass if you are working different areas of the world. Again, the rotor can be placed near the ground for easy access on the install.

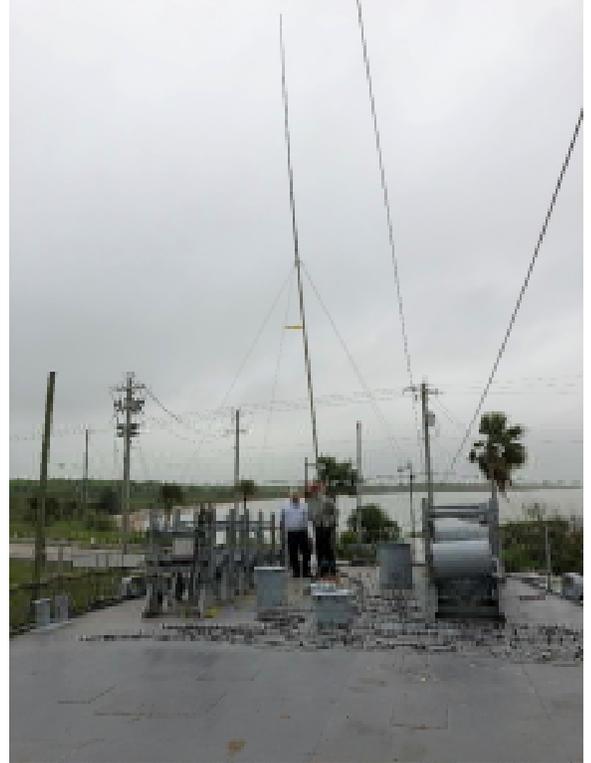
Where can I find more information on these small antennas? The web has a plethora of information about Mag Loops. Also, QST and QEX in the past 5 months or so has a number of articles about mag loops that will help you build one or help you understand more in-depth theory, if the theory side of antennas floats your boat. Part one of this article, in February, has a few references. And, JP gave an excellent hands-on one for Rich, K8NDS, www.hfmagneticloopantennas.com.

If you do build a Mag Loop, let the members of BVARC know so we can work you and enjoy the fruits of your efforts. Questions to rickhiller73@gmail.com Enjoy. 73....Rick – W5RH

MUSEUM SHIPS WEEKEND “Workday” Report

A pre-mobilization, of various elements on the ships, was conducted on Saturday April 13th. We erected the TDXS SteppIR antenna and tested it courtesy of Dan Vallalanti’s (KS5V) Icom transceiver. He demonstrated a working set-up with a QSO to New Mexico. We’ve further verified a through deck conduit for several transmission lines. We’re following up with another pre-mobilization (maybe May 18th, or earlier).

Thanks to K5IZO, AC0TX, KG5SXG, K5SV and KF5ONT for a good time aboard the Stewart and for all the help!!



SteppIR antenna assembled and tested on the USS Stewart at the actual MSWE mounting location.



HANDS-ON TRAINING ON ELECRAFT K3 AND N1MM

Curt Fletcher, WG5H, and Nizar Mullani, K0NM, will hold a hands-on training session prior to the May 9th, 2019 BVARC meeting. The training session will start at 7:00 pm and last 30 minutes. They will bring two K3/0 remotes, which have the K3 front panel, and laptops with N1MM to demonstrate how to operate the K3. You will learn how to set-up a contest using N1MM, setup the interface from N1MM to the rig and actually make contacts on the remotes. The remotes will be hooked up by hotspots to their respective remote K3 rigs at their ranches for real time QSOs. You will be able to operate CW or SSB. The teaching session will be informal and hands-on.



BVARC Build Session

The first BVARC Build Session was a success! Thanks for coming. New venues are in the works, so stay tuned for the next scheduled session, and keep looking for fun projects.

More info is in the “The Prez Says” article in this issue.

BVARC Rag Chew Net

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

03/27/19, K5LKJ (NCS), N5EKW (Katy), W5TKZ, K5IZO, W5TOM, K2MPP, K5LJ, AA5OA (Fort Smith, AR), K5JPP, KE5ITH (Georgetown), WA5CYI, KG5WPE, W5VOM. (13 Check-Ins)
Solar Cycle 24: SFI = 69, SN = 0, A = 6, K = 3 / Band Rpt: Fair

04/03/19, K5LKJ (NCS), W5TKZ, K5JPP, KG5CKR (Laredo), K5LJ, AA5OA (Fort Smith, AR), W5TOM, K5IZO, KG5WPE, WW5PA, W5VOM, KJ5Y (RCS)(W5FMH/club) (Angleton). (12 Check-Ins)
Solar Cycle 24: SFI = 71, SN = 18, A = 6, K = 3 / Band Rpt: Fair - Good

04/10/19, W5TKZ (NCS), W5TOM, K5IZO, K5JPP, N5DTT, W5RH, AA5OA (Fort Smith, AR), W5VOM, KG5WPE, WA5ANF(T), K5LJ. (11 Check-Ins)
Solar Cycle 24: SFI = 78, SN = 12, A = 16, K = 3 / Band Rpt: Fair

04/17/19, K5LKJ (NCS), W5TKZ, K5JPP, KF5ONT, AA0ST (Dickinson), W5RH, WW5PA, K2MPP, KF5PHA, WA5ANF (T), WB4KTF (Austin), W5VOM, KG5WPE. (13 Check-Ins)
Solar Cycle 24: SFI = 74, SN = 11, A = 6, K = 1 / Band Rpt: Good

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

Net conditions have been fair to good this month. Learn what others are doing.
Come join in the conversation each Wednesday evening. Regards. John K5LKJ



APRIL VE - FCC TESTING SESSION RESULTS

For the Saturday April 6th test session: We had 9 candidates.

New Licensees:

Kovalenko Y. (Technician)
McKeon C. (Technician)
Simpson J. (Technician)
McKinney, T. (Technician)

Braun G. (Technician)
Murrile D. (General)
Warnecke G. (General)

Passed General

KI5DFS
KG5VUE

Congratulations to all!

A great thank you to the VEs in attendance.

Examination sessions are held each month, usually on the same day as the Saturday BVARC Board meeting. These sessions are at the Bayland Park Community Center, 6400 Bissonnet St., Houston TX 77074

Five (5) of the candidates joined BVARC on-the-spot.

Details for candidates are found at www.bvarc.org/home/amateur-license/

Call Mark Janzer, K5MGJ at (832) 875-0526 or eMail: (k5mgj@yahoo.com) to pre-register.

MINUTES
Board of Directors Meeting
Brazos Valley Amateur Radio Club

April 6, 2019 9:00 AM
Bayland Park Community Center
6400 Bissonnet, Houston, Texas

Board Members Present:
Mike Hardwick N5VCX (President)
Jon Noxon KF5TFJ (Rec. Secretary)

Scptt Medbury KD5FBA (2yr@Lg Dir)
Donovan Balli KG5BDZ (Treasurer)
Jeff Greer W5JEF (Cor. Secretary)

Mark Janzer K5MGJ (V Pres)
Visitors
John Chauvin K5IZO

Recorded by Jon Noxon, KF5TFJ Recording Secretary

- 1) Call to Order: The President called the meeting to order at 9:06 and 15 seconds AM.
- 2) Establishment of Quorum: A business quorum was established.
- 3) Approval of Agenda: A motion made and seconded to approve the agenda.
- 4) Club President's Opening Statement: The President thanked those present for attending the meeting and noted a club VE testing session was on the schedule for today (April 6)
- 5) Emergency Business: None
- 6) Approval of Minutes from Previous BOD Meeting: The Board approved the minutes for the March 2019 BoD meeting.
- 7) Approval of Treasurer's Report: The Board approved the Treasurer's Report.
- 8) Corresponding Secretary: An oral report of status of mailings given and hand off of correspondence directed to Museum Ships Weekend done.
- 9) Old Business:

General Membership Meetings scheduled as follows, with topics not listed to be determined:

April 11, 2019 - Arduino 101- Jon Noxon and Associates

May 9, 2019 - FD (General Info on FD and Museum Ships, Hams for Hospitals)

June 13, 2019 - ARRL Field Day and K3 training

July 11, 2019 - TBD

August 8, 2019 - Ice Cream Social

Status of Museum Ships activities and donations; pending Ham Fest proceeds. "Cool Dude" will donate labor for A/C. "Cool Dude" still owes us his proposed package and pricing. Museum Ships work party to be scheduled for April 13 run transmission line and test SteppIR antenna, etc. Actual MSWE even starts 0000 zulu on June 1, and ends 48 hrs later (start 7PM local time May 31).

Motion made and approved to offer first time new hams who have been examined by the BVARC VE program a five-dollar first year membership to BVARC, valid only at the time of the examination.

- 10) New Business:
 - At this time, the club appears to be in the black from the GHHF. There are some final bills and deposit returns to be included.
 - Unaudited attendance is 750 persons. 2020 GHHF planned for setup on Friday March 6, 2020 and GHHG on Saturday March 7.
 - Planning underway for 2021 GHHF, which will be our 20th anniversary event.
 - Motion passed to make up the caterers shortfall (\$480.00)
10. Cost Saving Measures: Still looking into this on an on-going item. Meeting place, Awards Banquet and Storage Locker are major expenses.
11. Next BOD meeting date: May 4, 2019
- Future BoD dates: (all 2019) Jun 8, July 6, Aug 3, Sep 7, Oct 5, Nov 9, Dec 7 (Possible conflict with Pearl Harbor Event @ Stewart)
12. Comments:
13. Adjournment 10:16

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:

1/14 - 19 - Bill, kg5fqx	2/18 - 14 - Dave, k5ekw	3/25 - 18 - Clint, kf5ndf
1/21 - 14 - Dave, k5ekw	2/25 - 11 - Clint, kf5ndf	4/1 - 17 - Dave, k5ekw
1/28 - 16 - Clint, kf5ndf	3/4 - 14 - Dave, k5ekw	4/8 - 16 - Bill, kg5fqx
2/4 - 14 - Dave, k5ekw	3/11 - 15 - Bill, kg5fqx	4/15 - 15 - Dave, k5ekw
2/11 - 17 - Bill, kg5fqx	3/18 - interference	4/22 - 16 - Clint, kf5ndf

BVARC QUICK STATS

Date	Total Membeship	Newsletters	Life Members
4/24/2019	189	184	70



CQ CQ CQ Baseball Fans!

The first Ham Radio Night at the Sugar Land Skeeters is scheduled for Saturday, May 18, 2019 at 6:05PM! Tickets are \$13 each without a food voucher or \$19 each with a food voucher (Hotdog, Chips and Soda).

You may reserve by letting me know how many tickets or each kind that you will need and paying by PayPal to my email smedbury@windstream.net . Or I will try to get a code that will allow you to use Credit Card or the box office.

Let me, Scott (KD5FBA) know as soon as possible and See you at the BALL GAME!

2019 Officers:

President (2018-2019)
Michael Hardwick, N5VCX
n5vcx@att.net

Vice President (2019-2020)
Mark Janzer K5MGJ
k5mgj@yahoo.com

Recording Secretary (2018-2019)
Jon Noxon KF5TFJ
jon@noxon.cc

Corresponding Secretary (2019-2020)
Jeff Greer, W5JEF
greerjw@hotmail.com

Treasurer (2019-2020)
Donovan Balli, KG5BDZ

2 Year At-Large Board Member A: (2018-2019)
Jo Keener – KE7NSB
jolkeener25@gmail.com

2 Year At-Large Board Member B: (2017-2018)
Scott Medbury KD5FBA
smedbury@windstream.net

1 Year At Large (2019)
Jimmy Vance, W5ZTX
w5ztx@gmail.com

Regularly Scheduled 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
The Saturday before the 2nd Thursday, 9:00 AM (For Sept., check website)
Bayland Park Community Center
Bayland Park, 6400 Bissonnet, Houston.

Volunteer Examiner Program
The monthly testing session takes place on the same day and location as the BOD Meeting, but at 10:30 AM. However, please check the BVARC website for any last minute changes or updates.

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



Advertising in the BVARC Newsletter

Rates are as follows; \$25 per month 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.



BVARC EATING SCHEDULE

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

(typically within 200 miles of Houston)

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

06/07/2019 | West Gulf Division Convention (Ham-Com 2019)

Location: Plano, TX
Type: ARRL Convention
Sponsor: Ham-Com, Inc.
Website: <http://www.hamcom.org>

07/13/2019 | Swapmeet

Location: Texas City, TX
Type: ARRL Hamfest
Sponsor: Tidelands Amateur Radio Society
Website: <https://www.tidelands.org/>

08/02/2019 | South Texas Section Convention, Austin Summerfest 2019

Location: Austin, TX
Type: ARRL Convention
Sponsor: Austin ARC & Texas VHF-FM Society
Website: <http://www.austinsummerfest.org>

BRAZOS VALLEY AMATEUR RADIO CLUB

This newsletter, the BVARC BEACON, 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 BEACON 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 amateur radio testing has resumed. It takes place typically on the Saturday before the 2nd Thursday of each month at 10:30 AM. Location: Bayland Park Community Center, 6400 Bissonnet, Houston, 77074. BEFORE GOING, please check the BVARC website for any changes.

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, 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

Newsletter Printing, Assembly and Mailing: Daphne Rawlinson, K5VQY, daphne_rawlinson@hotmail.com.

Cameron Mitchell, K5CAM, k5cam@arrl.net ; Mike Teers, KG5SXG, miketr@windstream.net

JP Pritchard, K5JPP, jppnews@comcast.net; Esther Pritchard, elop@comcast.net

NOTE: Officers, advertising and eating schedule are on the website. They will only be published in the Newsletter every few months.

VOLUME 43, ISSUE 5

MAY 2019

**BRAZOS VALLEY
AMATEUR RADIO CLUB
P.O. BOX 2997
SUGAR LAND, TX 77487-2997
ADDRESS SERVICE REQUESTED**

FIRST CLASS POSTAGE

May 4 – BVARC Amateur Radio License Testing Session

May 9 – General Membership Meeting

May 31 – June 2 - Museum Ships Weekend



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