



# BVARC BEACON



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

SEPTEMBER 2018

VOLUME 42 ISSUE 9



## BVARC SEPTEMBER GENERAL MEMBERSHIP MEETING

### SEPTEMBER MEETING WILL NOT BE AT DEVINCI MAKER LABS!

At the Ice Cream Social I announced that the BVARC September meeting would be at the DaVinci Maker Labs in Alvin. We have had logistics problems. That field trip is now postponed to another time.

The September meeting will now be at the Mason's Lodge in Sugar Land. That's the usual place at the usual time. Rick Hiller, W5RH, will present an introduction to the EzNec antenna modeling software.

I apologize for any inconvenience.  
Pete Sauermilch, KD5QPX

## September 13<sup>th</sup> Meeting Presentation

### **Welcome to EZNEC** – Rick Hiller W5RH

Does antenna theory have you baffled? Are the pattern plots in the antenna handbooks confusing? What happens if you added one more director element to your existing Yagi-Uda? What is the feed impedance of an OCF dipole?

**EZNEC**, a PC based software application, can fill in the blanks on antenna theory and answer these and other questions by showing you the how's and why's of your antennas. **Welcome to EZNEC** will take you from knowing little about antennas to knowing how to use **EZNEC** to educate yourself on antenna theory and to allow you to achieve NEC-2 based results on your antenna set-up that will help you understand and improve your antenna system.

A handout listing reference articles and complementary software references will be provided.





## Prez Says

I want to thank everyone for a great Ice Cream Social and 40<sup>th</sup> birthday celebration for BVARC. From the pictures I saw it looked like everyone had a great time and had some great food. I wished I could have been there but my “walk-about” down under had just begun. Again thanks to Scott, Luanne, Kelli and Daphne for putting together a great event.

I will keep the rest of this short since I am still in VK land. I will be returning on the 4<sup>th</sup> and will have plenty of stories to tell about the people I met and the places I have seen. I have visited two Museum Ships that are active in the event and have a great display of original equipment. I have tried operating a few times but not a lot of luck, especially when running QRP. Someone told me that if I am running QRP, I need the biggest antenna I can find. I found one but it still didn't work. Here is a picture of me trying to make a quick contact back to the states.



More updates next month. Don't forget to buy your raffle tickets for a “station in box” We still have lots of tickets to sell so come to the September meeting and buy a ticket or two or twenty!

73,

N5VCX



# Report on the July General Membership Meeting

Submitted by Scott Medbury, KD5FBA,



BVARC celebrates its 40<sup>th</sup> Anniversary (Birthday) this year and the four clubs who participated, (BVARC, KARS, TDXS, and ECHO), in our joint field Day effort were invited to our August celebration and August means Ice Cream to members of BVARC and we had plenty of it with a BIG thanks to Blue Bell Creameries who donated half of the cold confection that we enjoyed during our annual Ice Cream Social on Thursday, August 9<sup>th</sup>. A total of 55 members and guests attended and got their fill of not only ice cream, but as a special treat, Daphne Rawlinson (K5VQY), baked a cake and was assisted in decorating by Tom Larsh (K5TNL) who constructed the tower and antenna that adorned the cake.

The ice cream social was organized by Scott Medbury (KD5FBA) and his wife, Lou Ann assisted by Kelli Medbury (KG5QJE). Rick (Radio Hotel) Hiller (W5RH) helped provide some of the toppings and a banner for the occasion. The Sugar Land Skeeters graciously donated a door prize of a team signed ball, 2 tickets to a future game and other goodies won by Jon Livingston (KB0MNM). It was noted by a couple there that the tickets could be used for the Ham Radio Night at the Skeeters on August 25<sup>th</sup>.



## Texas QSO Party – Saturday and Sunday, September 29 & 30.

This is my favorite amateur radio event of the year. It doesn't hurt that I operate from my Lake House in San Augustine County and usually I am the only ham that activates that county (SAUG). This is one of the largest State QSO Parties, so one is never at a loss for Qs, regardless of the county you are in.

Did you know that BVARC shows support for the TQP by sponsoring several plaques a year? You personally can show support by simply making 5 or 10 QSOs. You don't have to mobilize a mobile HF rig and roam Texas for 2 days (a number of members, however, have done so in the recent past); Simply making 5 or 10 Qs and sending in the log does the job. Some members really participate aggressively and make many hundreds of Qs; Others make 2 Qs. Both count equally regarding the actual number of BVARC members that participated.

Besides, it is FUN!



### BLT-50 and BVARC Night at Skeeters

These two neat events took place on Saturday, August 25.

Because of the short time between these events and post event activities and the newsletter deadline, an article is not available at press time. Look forward to a detailed article on each in the next issue of the BVARC BEACON.

The Balloon Launch, BLT-50, went off pretty much according to schedule. See the photo below of the launch. It reached 97,988'. The live video was fantastic. After the packages were retrieved, most participants went to Prasek's Hillje Smokehouse for a late bar-b-que lunch. Look for details of the other equipment and related happenings and more photos next month.

That evening, about 30 members attended the BVARC Night at a Skeeter's Game at Constellation Field. The photo below is of Julie Janzer, KF5FLZ, with the Skeeter's Mascot. Look for other details and more photos in next month's issue.



Where in the World is . . .  
Mongolia (JT-JV)  
CQ Zone 23 ITU Zone 32, 33

The thundering Mongol Horde rolled out of the Great Asian desert in the 13<sup>th</sup> and 14<sup>th</sup> centuries. Lots of Hollywood royalty played the great Khan on the screen. Led by John Wayne as Temujin, later Genghis Khan; then Orson Wells, Omar Sharif, Jack Parlane Stephen Boyd, or even Murvyn Vye, playing second banana to Richard Widmark as a sad sack Mongolian tribal chief in *Destination Gobi*; caught up in the backwater of WW II.



The Mongols rode in search of plunder and grazing for their animals. The Mongol horse is purported to be largely unchanged since the time of Genghis Khan. Nomads living in the traditional Mongol fashion still hold more than 3 million animals, which outnumber the country's human population. Despite their small size, they are horses, not ponies. In Mongolia, horses live outdoors all year, dealing with temperatures from 86 °F in summer down to -40 °F in winter, and they graze and search for food on their own. Some animals are slaughtered for meat. Other than that, they serve as riding and transport animals; they are used both for the daily work of the nomads and in horse racing.



The mare's milk is fermented into the national drink, *Airag*. Airag contains about 2% alcohol. The taste is slightly sour and requires getting used to it. The exact taste depends on the characteristics of the local pastures and the exact method of production. The beverage is a rich source of vitamins and minerals for the nomads. Hospitality mandates the host present a bowl of airag to every visitor. To reject the offer right away would be gravely impolite.

At their greatest, Mongols controlled the largest contiguous land empire in history, stretching from Korea in the East, China and Russia in the south and most of Eastern Europe in the West. Some historians regard the destruction under the Mongol Empire as some of the deadliest conflicts in human history. The Mongols were fierce warriors who scourged the landscape wherever they went of cattle and horses. They murdered their captives or forced them into their army. The Empire developed through a series of conquests and invasions, fueled by the need for grazing land to support Mongol cavalry and cattle. Definitely not vegetarians, their diet consisted of the animals they ate and the horses they rode.

The Empire was founded by Genghis Khan who initially forged a confederation of key Mongol tribes. Large areas of Central Asia and northeastern Iran were seriously depopulated, as every city or town that resisted the Mongols was subject to destruction.

During conquest, every soldier was required to execute a certain number of persons, with the number varying according to circumstances. The Mongol invasions induced population displacement on a scale never seen before in central Asia as well as eastern Europe. Word that the Mongol hordes were approaching would spread terror and panic.





After 100 years or so, the empire began to fracture because of infighting between descendants of Mongol rulers and the Mongols never regained the sweep and wealth of their former empire.

Fast forward to the 20<sup>th</sup> Century. In 1911 Mongolia was established as an independent nation. In Central Asia. What was Inner Mongolia, became a prisoner province of China, large parts of which contain the Great Wall of China.

Present day Mongolia is still one of the largest landlocked countries in the world, approximately 604,000 sq. miles. After it declared its independence in 1911, it became closely aligned with Russia and later the Soviet Union. After the Japanese invasion of neighboring Manchuria in 1931 and during the Soviet-Japanese Border War of 1939, the Soviet Union successfully defended Mongolia against Japanese expansionism. Mongolia fought during the Soviet-Japanese War in August 1945 to liberate Southern Mongolia from Japan and China.

At the 1945 Yalta Conference, one of the Soviet conditions for its participation, was that after the war Outer Mongolia would retain its independence. The referendum took place on October 20, 1945, with (according to official numbers) 100% of the electorate voting for independence.

Mongolia's total population as of January 2015 is estimated by at 3,000,000 people. About 59% of the total population is under age 30, 27% of whom are under 14. This relatively young and growing population has placed strains on Mongolia's economy. The horse culture is very much alive as about 30% of the population is nomadic, moving from place to place through the Great Gobi Desert or on the steppes.

The geography of Mongolia is varied, with the Gobi Desert to the south and with cold and mountainous regions to the north and west. Much of Mongolia consists of the Mongolian-Manchurian grassland steppe, with forested areas comprising 11% of the total areas. Most of the country is hot in the summer and extremely cold in the winter, with January averages dropping as low as -22 °F, a vast front of cold air comes in from Siberia in winter, causing very cold temperatures.



The Mongolian Amateur Radio Society represents hams in Mongolia; roughly 250 members. Mongolia is 220<sup>th</sup> on the Club Log DXCC Most Wanted List.

Reporting from the Dark Side,

Ron Litt, K5HM



## BVARC Monday Night Net – Request

**Looking for another NCS** – we need an NCS to fill the 3<sup>rd</sup> Thursday slot. If you are inquisitive or interested, please give me a call or an e-mail. Rick – W5RH 832-474-3713 rickhillier73@gmail.com



### Scott Royall, W5RUA - SK

Scott Royall, W5RUA, passed away Sunday August 12, 2018. Scott finally succumbed to the effects of respiratory problems and heart issues as a result of his long battle with Cerebral Palsy. At this time there will not be a memorial service. Please keep his family in thoughts.

Scott, who has been a BVARC member for a number of years, became a director on the Board last year to help with club functions and events. Scott's insight was helpful and eye opening it will be missed.



## Buy your raffle tickets now for the **Station in a Box**

BVARC is auctioning off a complete HF station. Includes everything you need to have in order to get on the air for HF operation.....

Icom 756 Pro3 Transceiver, 25 Amp power supply, LDG antenna tuner, 40 meter dipole with coax, Heil Proset Elite headset and J-38 style key

Check out the reviews of this great gear:

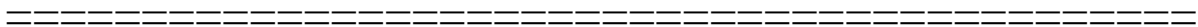
Icom 756 Pro3 – QST March 2005

LDG IT-100 ATU – eHam.com

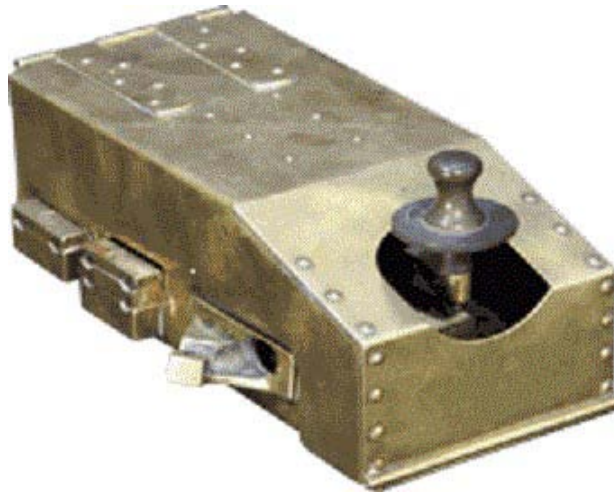
Heil Proset – QST May 2011



\$2 Tickets on sale at every meeting.  
Drawing November 8th -- Chili Supper



Disclaimer: This is the first issue that the Editor used MS Word 2016. Until then, he kept 2003 alive, but the upgrade was obviously needed for a long time. Therefore, please pardon some formatting and even errors of omission as there have been so many changes. It is like learning a new Word Processing software.



**Admiralty Key  
Made for the British Navy by Marconi  
1917**



### **OK, OK, OK!**

So the Editor has been featuring exotic keys when I needed some filler. Someday he will be able to add 1 to his collection but is not sure that the equity on his home is enough. Due to a last second arrival of 2 articles that really needed inclusion, the newsletter jumped from 10 to 12 pages (from 5 double sided to 6 double sided). He tried to “stretch” the articles, but only so much can be done.

So you SSB guys, here is your moment of glory. HOWEVER, no one over 50 is allowed to answer. For you, it would be too easy.

So who (under 50) knows the actual brand, model number and nickname for the following item? No cheating! Looking it up on the internet is forbidden! It MUST come from your wealth of knowledge.

Answer on the reflector.



**MINUTES**  
**Board of Directors Meeting**  
**Brazos Valley Amateur Radio Club**

August 4, 2018 11:00 AM  
Bayland Park Community Center  
6400 Bissonnet, Houston, Texas

Board Members Present:

Mike Hardwick N5VCX (President)  
Jon Noxon KF5TFJ (Rec. Secretary)

Donovan Balli KG5BDZ (Treasurer)  
Scott Medbury KD5FBA (2yr @ Lg Dir)  
Jo Keener KE7NSB (2yr @ Lg Dir)

Recorded by Jon Noxon, KF5TFJ Recording Secretary

- 1) Call to Order: The President called the meeting to order at 9:13 AM.
- 2) Emergency Business: None
- 3) Establishment of Quorum: A business quorum was established.
- 4) Approval of Agenda: A motion made and seconded to approve the agenda.
5. Club President's Opening Statement: The President thanked those present for attending the meeting.
6. Approval of Minutes from Previous BOD Meeting: With deletion of item 8c from the minutes that was included in error, the Board approved the minutes for the July 2018 BoD meeting.
7. Approval of Treasurer's Report: The Treasurer's Report was approved. The Board held a general discussion about a reduction in club expenses, especially the major outlays for the Masonic Lodge as a meeting place, and the club storage locker. No action at this time beyond further exploration of the topic.
8. Old Business:
  - 8a. General Membership Meetings scheduled as follows, with topics not listed to be determined:
    - August 9, 2018 – Ice cream social and 40<sup>th</sup> anniversary of BVARC to be celebrated. (Medbury and friends)
    - September 13, 2018 TBD Possibly field trip.
    - October 11, 2018 3-D Printing (John from KARS confirmed)
    - November 8, 2018 Chili Supper and Elections (Rick Hiller)
    - December 13, 2018 Home Brew Night (host TBD)
  - 8e. Additional solder stations for club and GHHF activities discussed.
9. New Business:
  - November elections will cover the following positions: Treasurer, Corresponding Secretary, 2-Yr Board Member, 1-Yr Board Member. Scott Medbury has stated his willingness to stand for the 2-Yr Board position. Donovan Balli has declared that he will not stand for reelection. The Corresponding Secretary slot was vacated by Keith Stolle, who moved to the Austin area for employment.
  - The board approved a budget of \$750.00 for purchase of solder stations, supplies and accessories. Balli is taking point on this.
  - The report for Field Day has been submitted.
  - Treasurer suggested that rather than writing a number of checks to cover known activities that prepaid debit cards be used when the budget is known and approved (FD, MSWE, etc.). No action taken on this item at this time.
10. Next BOD meeting date: September 8  
Future BoD dates: October 6, November 3, December 1\* NOTE: date changed from December 8, for which a room was not available.
11. Comments: Nothing of substance.
12. Adjournment: The meeting was adjourned at 10:11

# The Radio Hotel - The Illusive Wet Noodle and 200 Degrees

by Rick Hiller – W5RH

## The Illusive Wet Noodle

We've all heard them. Those catch phrases, similes and metaphors, addressing various areas of our lives.....Better than sliced bread, slicker than s--t [etf], faster than a speeding bullet, busy as a bee, like a knife thru butter and others. In Ham Radio ours is "the Wet Noodle". You hear the Old Timers say, "...years ago, when 10 Meters was open, you'd just throw up a wet noodle and work the world". Then they'd add... "on 5 watts". I wish we had those times now HI.

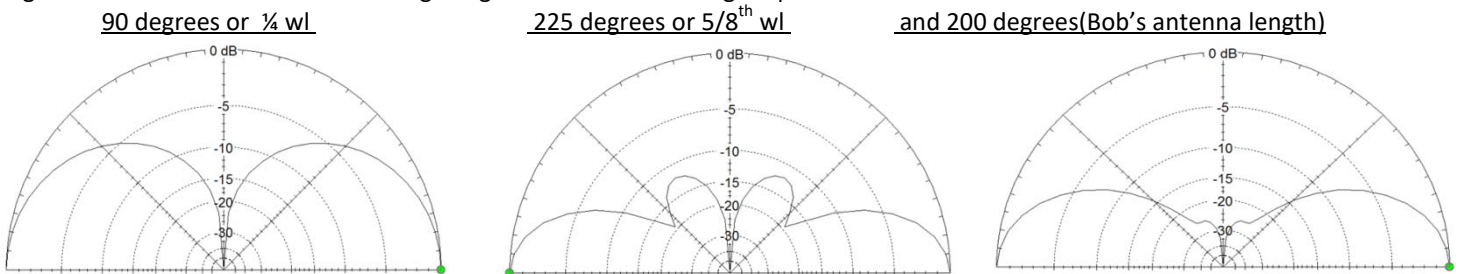
OK, propagation was great back then, but a wet noodle? Why a 'wet' noodle? Why not a dry noodle? And is it wet with water or chicken broth or tomato sauce, even better yet, maybe, salt water for better conductivity. What pasta is best shape for the noodle? Rigatoni, manicotti, spaghetti? All cut to the proper length, of course. What type of pasta flour makes the best pasta antenna material? Checking my local grocery store shelf I found semolina and rice flour based, egg based and also gluten free flour pasta products.

So, just what is a Wet Noodle antenna? A QST Search back to 1915 shows up blank and a Google search shows a few references, but all to the same item on QRZ. You see, some Ham wrote about it on the internet in that he did try and use a vertical made of a wet noodle and he was successful in hitting a local repeater, but he was also successful in hitting that repeater by touching his finger to the SMA jack on the top of the rig. So, nothing magical about the wet noodle from that story. No other anecdotal evidence was found. Also, BTW, EZNEC does not come with an example Wet Noodle model.

Unfortunately, in summary, it seems that from what I have found, the wet noodle will remain illusive, along with hunting Snipes, left handed smoke shifters, Sasquatch, Nessie and Jackalopes. My guess is that the Wet Noodle Antenna was an invention of, the infamous, Larson E. Rapp, W1OU, of Kipperling-On-The-Charles, CT. It kind of fits in with his other inventions and ideas. [Goggle "Larson E. Rapp" ....K5HM's nemesis.]

## 200 Degrees

Not a wet noodle, but a real antenna of 200 electrical degrees of vertical metal. OK, so what is so magical about 200 electrical degrees? In vertical antennas it is the magic number of electrical degrees that produces the lowest radiation lobe and most gain out of a vertical without, and here is the kicker, without producing any other high angle lobes. Everybody knows the ¼ wave vertical, or 90 electrical degrees, and the pattern it produces and we all know of the quite common 5/8<sup>th</sup> wavelength mobile "gain" antenna or 225 degrees electrical. At the iHOP breakfast awhile back, Bob Stroupe, WB5JWN, one of our resident commercial broadcast engineers, corrected me in a statement that I had made. I stated that the 5/8<sup>th</sup> wl antenna was the most gain you could get out of a linear wire. Bob corrected that to 200 degrees. Showing this, below, are 3 vertical pattern pictures from EZNEC over "perfect ground". Note that there are no high angle lobes in the 200 degree plot.



5/8<sup>th</sup> wl is easy to match, as it requires only xL (a coil) to do so, hence its use in mobile set ups. The 200 degree vertical is used in commercial broadcast. Perfect ground is approached with a very extensive and efficient radial system required by the FCC of all AM broadcast stations, as their goal is a very strong ground wave for local reception.

Note: The full "200 Degree" article and gain patterns are on the BVARC web site "Tech Articles" page.

Enjoy your hobby. 73...Rick – W5RH

**Next time.... Where the Rubber Meets the Road**



## BVARC Rag Chew Net

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

07/25/18, K5LKJ (NCS), K5JPP, W5RH, K5IZO, K5LJ, W5TKZ, KF5YYZ, K2MPP, AA5OA (Ft. Smith, AR), KG5WPE, N5KQA (San Antonio), KJ5Y (RCS)(W5FMH/club)(Angleton). (12 Check-Ins) / Band Rpt: Good  
Solar Cycle 24: SFI = 66, SN = 0, A = 17, K = 1

08/01/18, K5LKJ (NCS), WW5PA/5 (M)(Fredricksburg), K5IZO/5 (Jasper), K5JPP, W5TKZ, AA5OA (Ft. Smith, AR)(R), KG5WPE.  
(7 Check-Ins) / Band Rpt: Fair / Solar Cycle 24: SFI = 68, SN = 0, A = 6, K = 2

08/08/18, K5LKJ (NCS), W5TKZ, K5JPP, W5RH, K2MPP, W5TOM, WA5CYI, W5VOM, KG5WPE, W1BG (Katy), WD6CQO (Nederland). (13 Check-Ins) / Band Rpt: Fair / Solar Cycle 24: SFI = 69, SN = 0, A = 10, K = 2

08/15/18, K5LKJ (NCS), W5TKZ, W5TOM, W5RH, K2MPP, N5DTT (Bellaire), K5LJ, K5IZO, KG5WPE, WA5CYI.  
(11 Check-Ins) / Band Rpt: Good  
Solar Cycle 24: SFI = 68, SN = 12, A = 4, K = 3

08/22/18, K5LKJ (NCS), K5JPP, W5TOM, K5LJ, AA5OA (Ft. Smith, AR), W5TKZ, K2MPP, KG5YYQ, WW5PA/5 (M)(Magnolia, AR), KC5JAR, N5DTT (Bellaire), KG5WPE, W5RH, KJ5Y (RCS)(W5FMH/club)(Angleton), WN5A.  
(15 Check-Ins) / Band Rpt: Good /  
Solar Cycle 24: SFI = 67, SN = 15, A = 7, K = 2

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

Net conditions have been fair to good this month. Check out your station.  
Come join in the conversation each Wednesday evening.

Regards. John K5LKJ



## Hamfests

(typically within 200 miles of Houston)

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

### **10/06/2018 | HamEXPO**

**Location:** Belton, TX  
**Type:** ARRL Hamfest  
**Sponsor:** Temple Amateur Radio Club  
**Website:** <http://TARC.org/hamexpo/>

### **10/20/2018 | South Texas Hamfest & Electronics Expo**

**Location:** Sinton, TX  
**Type:** ARRL Hamfest  
**Sponsor:** South Texas Hamfest Association  
**Website:** <http://www.southtexashamfest.org>



Regarding the question about the microphone, REMEMBER, no cheating! You must be under 50 and it must come from your knowledge without any further research!

# 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](http://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 2<sup>nd</sup> 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 is being reorganized. Check upcoming newsletters or the BVARC website for developments.

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](http://www.bvarc.org)

Other contacts include:

President:, Mike Hardwick, N5VCX, [n5vcx@att.net](mailto:n5vcx@att.net)

Newsletter Editor, John Chauvin, K5IZO, [k5izo@yahoo.com](mailto:k5izo@yahoo.com)

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

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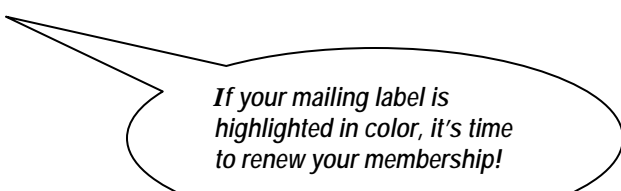
SEPTEMBER 2018

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

FIRST CLASS POSTAGE

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**September 13, General Membership Meeting  
September 29 & 30, Texas QSO Party**



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