



BVARC BEACON



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

NOVEMBER 2018

VOLUME 42 ISSUE 11

Chili Supper – November 8th Meeting

The November meeting brings food and voting to the forefront of BVARC meeting activity. The eating part is the **Annual Chili Supper**. Cook up a crock pot of your favorite chili and bring it to the meeting to be shared by all in attendance. This is one of BVARC premier social events.

BVARC supplies the AC outlets, bowls, plastic utensils, condiments, napkins, drinks and ice.

Should you wish to bring complementary food such as:

stuffed jalapenos, desert, chopped onions, shredded cheese, TUMS, etc.

Please, let me know at:

rickhiller73@gmail.com Call or text at **832-474-3713**.

The BVARC Board of Directors Elections for 2019 Offices – Call for Candidates

On November 8th, the Chili Supper meeting, we will elect replacement officers for **Vice President, Treasurer, Corresponding Secretary, a 2 Year and a 1 Year At Large Director**

We need folks to step up. By nominating yourself or another member we can fill the ballot and have a decent election and a smooth transition in January to a full Board of Directors and continue with a smooth running of the club.

Step up, volunteer to be part of the core group that runs BVARC. It is fun, it is satisfying and it doesn't take much time.

Questions? E-mail me, call me or talk to me the night of the meeting before the elections.

Rick Hiller W5RH rickhiller73@gmail.com Text or call 832-474-3713. Thank you and 73.

Drawing at the November 8th Meeting

Station in a Box Raffle

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.

NOTICE – The raffle now includes a Kenwood 2 Meter Mobile Transceiver donated by Jay Fleming, KF5DCJ.



\$2 Tickets on sale before the raffle drawing



Museum Ships – December 2018

Please save the dates – Saturday December 8 and Sunday December 9 for a Pearl Harbor Day weekend activation at the ships. In addition to the radio activation, submariner vets will be present to speak to the public about the silent service. Contact Mark Janzer – K5MGJ to volunteer and for more information.



Brach J-7-A
Flame Proof Key
1921



The Prez Says

I hope everyone that attended the October meeting and enjoyed the presentation on 3D printing. 3D printing will soon become a multi-billion dollar industry producing from car parts to body parts. This is truly a technological advancement for society that will form the future in ways we cannot believe.

As for the people that missed (including yours truly), that's unfortunate. I had wanted to be there but the commute from Dallas is a little rough. Again I want to thank John Thurmond, K5JBT for his great presentation. If you would like to see the presentation, it is available at:

https://docs.google.com/presentation/d/1Qsor8E7Y-FzhmBlSsQ4_fwTwYYcilyFMnGn9MPv3w/edit?usp=sharing

Coming up in November is the annual Chili supper and the club elections. If you would like to help with the Chili supper, give Rick Hiller, W5RH or Daphne Rawlinson, K5VQY a call and let them know. I know Rick and Daphne will appreciate your call and help.

We will also be having the club elections in November. Rick Hiller, W5RH (boy, he gets around!) will handling the elections. There will be more in the newsletter about the elections. The two year positions that are open are: Vice President, Treasurer, Recording Secretary 2 year at-large Director and 1 year at-large Director. If you would like to volunteer to help with club functions and events, Rick and let him know. You can also simply have someone nominate you from the floor. Remember without your help serving the club, the club will die. We need your help to keep BVARC running and growing.

The Greater Houston Hamfest is just around the corner. It will be held on Friday, March 22nd and Saturday March 23rd. Friday will be the educational day and set-up with sales on Saturday. You will start to see flyers promoting it around the meetings over the next few weeks. We need around 30 volunteers for the Hamfest so if you would like to help out, contact anyone on the board of director and let them know.

Don't forget the December meeting where we have home-brew night. Get ready and bring your best home-built equipment to show it off to club. In the past we have had extremely good turn out for this and I hope it continues this year. The meeting will be held at the community center on December 8th. Let Jon Noxon, KF5TFJ if you would like to enter a creation for the event.

Last but not least is the "Station in a Box". The drawing will be held at the chili supper for a really great station package that now includes a brand new 2 meter radio. Tickets are only \$2 and there are plenty still available for sale. Buy your ticket now and take a chance. The odds are much better than the Lotto or Powerball!

See everyone at the chili supper!

73,
N5VCX



**Where in the World is . . .
The Marshall Islands (V73)
CQ Zone 31 ITU Zone 65
IOTA OC-028**

Think WW II - the big one. Names of individual atolls are engraved forever in American military history. Part of Admiral Nimitz' island hopping strategy, islands in the Marshall and Gilberts chains became battle grounds. After the war, the islands, especially Bikini and Eniwetok atolls became U.S. atomic testing grounds. The first hydrogen bomb was tested there,



Officially named the Republic of the Marshall Islands, none of the 29 low-lying coral atolls and the five coral islands in the Marshall group rises to more than 20 feet above high tide. The islands are coral caps set on the rims of submerged volcanoes rising from the ocean floor. The island units of the Marshalls are scattered over about 180,000 square miles of the Pacific.

The Marshall Islands consists of 29 atolls and 5 individual islands totaling about 1,225 islands and 870 reef systems scattered over 750,000 square miles of the Central Pacific. After almost four decades under US administration as the easternmost part of the UN Trust Territory of the Pacific Islands, the Marshall Islands attained independence in 1986 under a Compact of Free Association.

Because of the close association with the United States the Marshall Islands currency is the U.S. Dollar.

The largest atoll in the group is Kwajalein, which has land area of only six square miles but surrounds a 655-square-mile lagoon. The U.S. maintains a large missile testing facility and radar station on it. Its majority English-speaking residents (about 1,000 mostly U.S. civilian personnel) are often called by the shortened name; *KWAJ*.



In 1885 Germany gained control over the Marshall Islands from Spain under the demarcation limits set by the Protocol of Rome. At the outbreak of World War I in Europe, Japan joined the Triple Entente; an treaty of friendship between the U.K, France and Imperial Russia. She seized the Marshall Islands against only token resistance. In 1922 the islands were placed under Japanese administration as a League of Nations Mandate until the beginning of World War II in the Pacific. 1941.

In early 1944, the U.S. 7th Infantry Division, invaded Kwajalein. Of the 8,782 Japanese personnel deployed to the atoll, 7,870 "Japanese" were killed according to U.S. military documents. Additionally, many of the native Marshallese fled the island in their canoes just before the battle. In February 6, 1944, Kwajalein was claimed by the United States and was designated, with the rest of the Marshall Islands, as a United Nations Trust Territory under the United States.

In the years following, Kwajalein Atoll was converted into a staging area for campaigns in the advance on the Japanese homeland. After the war ended, the United States used it as a main command center and preparation base in 1946 for Operation Crossroads, the first of several series of nuclear tests at the Marshall island atolls of Bikini and Eniwetok.



the

Most people living on this speck of an Army base smack in middle of the Pacific Ocean develop some passion that substitutes for life in the "real" world, as they call it. For some its golf. There is a small 9-hole course, next to the only runway. It is maintained by volunteers many who also work at the *Ronald Reagan Ballistic Missile defense Test Site*.

Kwajalein Atoll has been leased by the United States for missile testing and other operations from well before independence for the Marshall Islands. Although this military history has influenced the lives of the Marshall Islanders who have lived in the atoll through the war to the present, the military history of Kwajalein has prevented tourism. Since 2000, Kwajalein has become one of five preferred locations from



which rockets can be launched into equatorial orbit.

Access to KWAJ, as those in the know call it is restricted. Basically, the entire island is a U.S. Army base. A visitor needs a letter of permission or be employed as a civilian to get on the weekly flight to KWAJ. Or you could be one of the civilian contractors who work there.

CONFIRMING CONTACT

RADIO	DATE	UTC	MHz	MODE	RST
1com 9100	8/22/17	0419	14	SSB	5/9

The Marshall Islands are number 110 on the Club Log Most Wanted list. QRZ lists 146 licensed amateurs in the Marshall Islands but none on the *KWAJ*. MY most recent QSO was with Randy, V73/WW6RG. Randy is a commercial pilot who sometimes has a layover on the atoll.

Reporting from the Dark Side,

Ron, K5HM

Home Brew Night—December 13, 2018

Submitted by Jon Noxon, KF5TFJ

The “Maker’s Spirit” is coming to the December 2018 Meeting...

This popular event is a chance to show off your stuff, and claim the 2018 bragging rights for “Best of Show”. The Maker’s Spirit dwells within us all, and for many only needs to be rekindled from time to time, and the time is now. Whether from desire, need or inspiration, bring your stuff to the December 13 meeting (that’s Thursday the thirteenth, not Friday).

Looking forward to seeing what you’ve got.

(Okay, I admit it. The ad is from the 1920’s and now considered sexist. Today it would show a couple of young ladies too.)

Boys Today—Men Tomorrow!

ERECTOR

The most wonderful construction toy in the world. Boys can make machines, bridges, cranes, towers. In fact any engineering feat can be duplicated with a Gilbert Erector. The \$5.99 sets have a sturdy electric motor that will lift 200 pounds. Erector is the toy most boys pick for it is the most popular toy in the Gilbert line.

THOUSANDS of young men from 20 to 30 years old, who are today making great strides in engineering, chemistry, and other sciences were Gilbert Toy boys just a few years ago. I have watched their progress with intense interest and I will tell you that I am mighty proud that my engineering toys have started these boys on the road to success. When I was a boy I loved to play with scientific things myself, but no one made the kind of toys that I wanted, so I said that some day I would make for a new generation of boys, toys that I wanted when I was a kid myself.

That is why there are wonderful Gilbert Toys for all kinds of scientific fun, electrical sets, telegraph sets, signal engineering, weather bureau outfits, civil engineering, hydraulic and pneumatic engineering, light experiments, sound experiments, glass blowing, mineralogy, magnetism, as well as all kinds of magic outfits, and sets to perform tricks with coins, handkerchiefs, and cards. There is a Gilbert Toy for every boy. They range in price from \$1.00 to \$30.00.

Make this the best Christmas you ever had in your life, get a \$5 Erector Set or any other Gilbert Toy for the kid brother, boy friend or son.

A. C. GILBERT, President

THE A. C. GILBERT COMPANY
New Haven, Conn.

IN CANADA
THE A. C. GILBERT-MENZIES CO.
LIMITED
Toronto

GILBERT TOYS

IF YOU want to know more about Gilbert Toys send for the Gilbert 1923 Year Book. It not only contains wonderful articles on radio, magic, sports, chemistry and engineering that will delight the heart of any boy, but it is also a complete catalog of Gilbert Toys. Use the coupon opposite.

The A. C. Gilbert Company,
18 Blackley Avenue,
New Haven, Conn.

Included in it. Send the 1923 Year Book to:

Name.....
Street.....
City..... State.....

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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:

7/9 - 15 - Bill, kg5fqx	8/20 - 17 - Dave, k5ekw	9/24 - 17 - Clint, kf5ndf
7/23 - 18 - Clint, kf5ndf	8/27 - 18 - Clint, kf5ndf	10/1 - 19 - Dave, k5ekw
7/30 - 18 - Terry, k5pgf	9/3 - 13 - Dave, k5ekw	10/8 - 23 - Bill, kg5fqx
8/6 - 15 - Dave, k5ekw	9/10 - 26 - Bill, kg5fqx	10/15 - 14 - Dave, k5ekw
8/13 - 18 - Bill, kg5fqx	9/17 - 11 - Dave, k5ekw	10/22 - 18 - Clint, kf5ndf

BVARC QUICK STATS

Date	Members	Newsletters	Life Members
10/23/18	185	176	69

MINUTES

Board of Directors Meeting Brazos Valley Amateur Radio Club

October 6, 2018 9:00 AM
Bayland Park Community Center

Board Members Present:

Mike Hardwick N5VCX (President)
Mark Janzer K5MGJ (Vice President)
Mike Monsour AC0TX (1yr @ Lg Dir)

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

Jon Noxon KF5TFJ (Rec. Secretary)
Scott Medbury KD5FBA (2yr @ Lg Dir)*

* by telecom

Recorded by Jon Noxon, KF5TFJ Recording Secretary

1. Call to Order: The President called the meeting to order at 9:15 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: The Board approved the minutes for the September 2018 BoD meeting.

7. Approval of Treasurer's Report: The Treasurer's Report was approved.

8. Old Business:

8a. General Membership Meetings scheduled as follows, with topics not listed to be determined:

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 Jon Noxon KF5TFJ)

8b. Solder stations are now in hand (Balli in possession); Soldering iron thermometers (two) arrived from China and were turned over to Balli at the BoD meeting

8c. Cost savings measures: Board is still investigating this issue. Query with Slumberger is still open. Janzer has possible source for storage facility under investigation.

8d. BVARC MSWE activities discussed, including the need to get going on Stewart radio room upgrades and repairs. Pearl Harbor day event discussed. Date around the weekend of December 8.

8e. Added item: Raffle status ticket sellers holding on to money until turned over to treasurer.

9. New Business:

- BVARC will participate in the hamfest at Rockport. Janzer, Medbury and Noxon to attend.
- Need to establish arrangements for Annual Award Banquet.
- Balli again stated he will not continue as Treasurer next year, so it is urgent to elect a replacement!
- VE testing to continue upon availability of a replacement VE Coordinator.
- Insurance policy has been renewed.
- Need to reserve room for 2019 BoD meetings.

10. Next BOD meeting date: October 6

Future BoD dates: November 3, December 1* NOTE: date changed from December 8, for which a room was not available.

11. Comments: The status of Raffle Tickets was discussed.

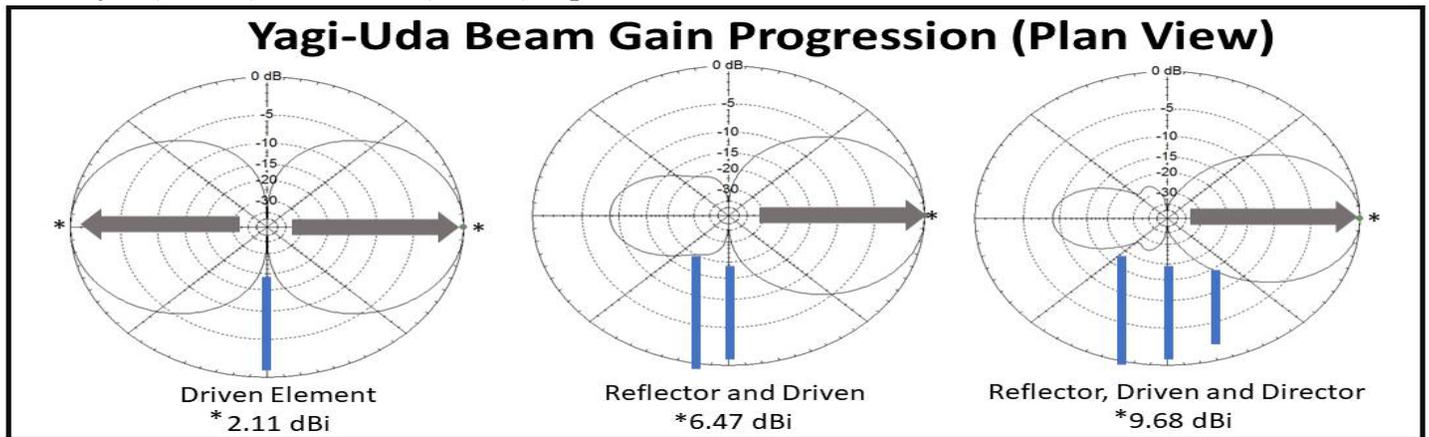
12. Adjournment: The meeting was adjourned at 10:10

The Radio Hotel Gain – The Final Frontier

by Rick Hiller – W5RH

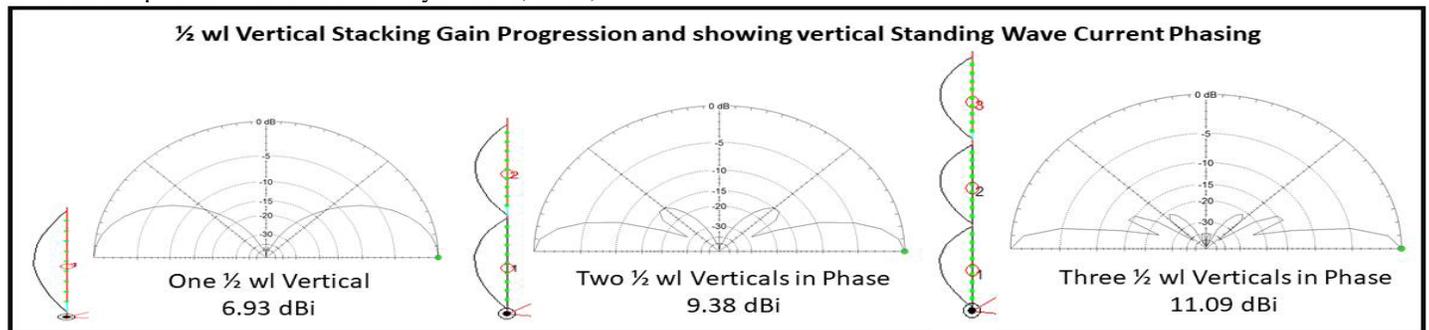
Ok, so gain is really not “the final frontier”, but it sounded good, thanks to Cap’n Kirk.. However, gain is what this Radio Hotel is about. Antenna gain – increasing the ERP – Effective Radiated Power -- and how you accomplish that.

First things first.....if your transmitter puts out 100 watts then, the antenna, if matched properly, will accept the 100 watts and radiate E and H waves of equivalent energy. You cannot get more power out of an antenna than what you put into it. You can, however, modify the radiation pattern in order to concentrate most of the radiated energy in a particular direction, or a particular launch angle, or even to NOT radiate in a particular direction. So with that restriction, let’s look at how you modify the radiation pattern to provide gain (forcing the radiation in a particular direction). The Yagi-Uda “beam” might be the easiest to look at, below, as the gain builds from a dipole (2.11 dBi) to a 3 element (9.68 dBi) Yagi.



A Yagi is all well and good if you can rotate the antenna to hear and work stations in various directions from your QTH. But....what if you can’t rotate the antenna?

Another way to achieve gain is by co-linearly stacking elements. Take a 2 meter vertical antenna. You can simply extend the vertical element to add another half wavelength section or add 3 or 4 more sections. However, you cannot simply extend the wire, you must also provide proper “phasing” of the individual $\frac{1}{2}$ wavelength sections. You can see below in the 2D azimuth views that 2 or 3 sections with the same phase provide constructive wave mechanics to create an omni-directional lobe of concentrated radiation energy. The number of sections and the separation of the sections controls “the gain and lobe angle benefit” that we receive. Phasing can be accomplished in a number of ways – coils, stubs, etc.



So, from your home 2 meter station, instead of using a Yagi to get the gain you need, you can use a vertical, but one that is made up of stacked and phased sections of $\frac{1}{2}$ wl dipoles. You’d be surprised with how much it improves your signals into repeaters far away. Even for the digital modes like DMR, a strong signal will help you get into those repeaters that are gateways to the talk groups you wish to communicate with. Of course, the choice of antenna system is yours alone. Choose a Yagi with a rotator or a vertical co-linear with equivalent gain. Both have benefits and detriments.

Next time.... Dissecting Series #3 -- Coax Enjoy your hobby....W5RH

BVARC's presence at the South Texas Hamfest & Electronics Expo 2018, Sinton, TX

Submitted by Jon Noxon, KF5TFJ



Left to right: Jon Noxon, KF5TFJ, Mark K5MGJ, Scott KD5FBA

We were at the South Texas Hamfest & Electronics Expo 2018 offering raffle tickets for the "Station in a Box". Sales were better than expected and we had a great location near the entrance and directly across from the ARRL table, we twisted the arm of West Gulf Division Vice Director, John Robert Stratton, N5AUS to take the photo. Thanks!

Powering the Telegraph System that Stretched Across Australia

Submitted by Mike Hardwick, N5VCX

Below are a few pictures and descriptions on the battery system that supplied the electricity for a 2000 mile telegraph system. Repeater stations were placed every 150 miles or so. The repeater stations were manned with the operator copying telegraph traffic and resending it. The telegraph system provided a reduction in news and messages from months to days. It was truly a marvel for 1880's Australia.

Electricity for the Line

Meidinger cells provided the electricity to run the telegraph line.

They were made of glass and each one produced about 1.5 volts. A lot of them were needed to provide the operating voltage of 120 V.

Maintaining the batteries took up a lot of the men's time. It was a constant job keeping them in good working order.

The OT line was 3 000 kilometres long.

A signal would be barely detectable at the end of the line if it wasn't boosted along the way.

Repeater stations were built at intervals of 250 kilometres or so. There were originally twelve of them between Adelaide and the cable station at Port Darwin.

Alice Springs Telegraph Station

POWERING THE OVERLAND TELEGRAPH LINE

Long distance telegraph wires, such as the Overland Telegraph Line (OTL), required a lot of electricity to function. At a time before mains electricity existed, Alice Springs had a battery of about 150 electrochemical cells connected in series. The cells you see above are exact replicas of those that had to be maintained by workers on a vast scale, until around 1910 when the battery was upgraded. This particular cell design, called the Meidinger Cell, was useful for its long shelf life and ingenious design. Each cell could last for up to three months before losing charge.

THE MEIDINGER CELL: 1870S BATTERY POWER IN ACTION

SEND A MESSAGE IN MORSE!
At either end of the table you will find a morse key and sounder. These are genuine pieces of historic equipment sourced from across Australia - please treat them gently.

Imagine you are an operator working at Alice Springs. Using the Morse Code alphabet, send an electric telegram to the person opposite you.

Imagine they are 250 kilometres away at the next station, hearing your message through their sounder at almost the speed of light.

SCIENCE IN DEPTH

Inside the small glass jar cells, two metal plates are submerged in an electrolyte facilitating a chemical reaction. This reaction produces a flow of electrons from zinc to copper. Zinc ions enter the electrolyte solution, passing on a charge to the copper that is slowly deposited in solid form at the bottom of the cell. The cell harnesses these moving electrons to produce a direct current of just over a single volt.



BVARC Rag Chew Net

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

09/26/18, K5LKJ (NCS), W5TKZ, K2MPP, N5EKW (Katy), W5TOM, W5VOM, WA5CYI, K5IZO/5 (P)(Jasper), W5RH, KF5JMJ (Pasadena), K5LJ, KP5ZAC (T), KG5WPE, KJ5Y (RCS)(W5FMH/club)(Angleton). (15 Check-Ins)

/ Band Rpt: Fair / Solar Cycle 24: SFI = 68, SN = 0, A = 11, K = 2

10/03/18, K5LKJ (NCS), W5TKZ, W5RH, W5TOM, K5LJ, K2MPP, K5IZO, K7NIQ (FL), K9GEM, W5VOM, KG5WPE, KG5YYQ (Rosenberg), KJ5Y (RCS)(W5FMH/club)(Angleton). (13 Check-Ins)

/ Band Rpt: Good / Solar Cycle 24: SFI = 68, SN = 14, A = 5, K = 2

10/10/18, K5LKJ (NCS), W5TKZ, K5JPP, K2MPP, K5LJ, W5VOM, W5RH, KD5CDM, AA0ST (Dickinson), KG5WPE, WA5ANF, KE5ITH (Georgetown), WD6CQO (Needville). (13 Check-Ins)

/ Band Rpt: Fair / Solar Cycle 24: SFI = 69, SN = 0, A = 21, K = 4

10/17/18, W5TKZ, (NCS), W5VOM, K5JPP, K5LKJ/5 (P)(Conroe), K5IZO, K5RBI (Riviera), AA0ST/5 (P)(McAlester, OK), KG5WPE. (8 Check-Ins)

/ Band Rpt: Fair, Solar Cycle 24: SFI = 69, SN = 0, A = 3, K = 0

10/24/18, K5LKJ (NCS), K5JPP, K5IZO/5 (P)(Jasper), W5TKZ, K5LJ, AA0ST (Dickinson), KG5WPE, W5RH, WA5AMF (T), W5VOM, KJ5Y

(RCS)(W5FMH/club) (Angleton), AA5OA (R)(Fort Smith, AR). (15 Check-Ins)

Band Rpt: Fair/Solar Cycle 24:SFI = 69, SN = 0, A = 5, K = 1

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

Net conditions have been fair to good this month. Improve 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>

01/12/2019 | [San Antonio Radio Fiesta 2019](#)

Location: Schertz, TX

Type: ARRL Hamfest

Sponsor: San Antonio Radio Club

Website: <http://w5sc.org>

X

X

03/22/2019 | [Texas State Convention \(Greater Houston Hamfest\)](#)

Location: Rosenberg, TX

Type: ARRL Convention

Sponsor: Brazos Valley Amateur Radio Club

Website: <http://houstonhamfest.org>

X

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 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

Other contacts include:

President., Mike Hardwick, N5VCX, n5vcx@att.net

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

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

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

VOLUME 42, ISSUE 11

NOVEMBER 2018

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

FIRST CLASS POSTAGE

November 8 – Ice Cream Social, Elections, Station In A Box Raffle, Brief General Membership Meeting



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