



# BVARC BEACON

Newsletter of the Brazos Valley Amateur Radio Club

AMATEUR RADIO FOR SOUTHWEST HOUSTON AND FORT BEND COUNTY



VOLUME 48 ISSUE 2

FEBRUARY 2024

## February General Membership Meeting is Homebrew Night!

BVARC General Meeting – February 8th, 2024, 7:30 PM

Community Volunteer Fire Department Community Center, 16005 Bellaire Blvd, Houston 77083

**Don't forget the Greater Houston HamFest is March 1<sup>st</sup> and 2<sup>nd</sup>. Sign up to volunteer now!**

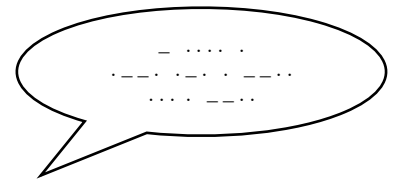
**Check out the Greater Houston HamFest Flyer in the newsletter.**

## Seeking Ham Radio Knowledge?

Don't miss the cadre of expert speakers March 2<sup>nd</sup> at the Greater Houston Ham Fest. We'll have Riley Hollingsworth, K4ZDH, ex-FCC Enforcement Chief; our West Gulf Division ARRL Director John Stratton, N5AUS; "The Cat in the Hat Kit Guy" Joe Eisenberg, K0NEB, followed by a list of local experts like Walter Holmes, K5WH, talking about Digital modes; Stephen Flowers, W2WF, showing us antenna modeling with MMANA; and BVARC's own "Pretty Good Fellow," Terry Leatherland, K5PGF, outlining his HOA friendly antennas along with Bill, N4HPG, highlighting his work in the ham station power arena using solar. Plus, possibly, an astronaut visit or an ARISS "show and tell," a vendor presentation or two and who knows whom else.

C U there!

## The Prez Sez



Just a short Pres Sez this month since there is so much going on. From Winter Field Day to the Greater Houston HamFest the club is staying busy.

By the time you get this, Winter Field Day will be over. There was only time for a few pictures in this edition but next month Kori will have a write-up on a successful event so make sure you get next month's Beacon.

The February 8<sup>th</sup> General Meeting will be Home Brew Night. Bring the best of your homebuilt equipment to show to the club. Prizes will be awarded for the most unique and the least expensive. Make sure you come out.

Check the Greater Houston HamFest Flyer in the newsletter. Volunteers are still needed to the work the event so drop me an e-mail if you would like to help.

Just around the corner is Museum Ships Weekend and ARRL Field Day in June. If you would like to help on either, get with Mark Janzer or myself on either event.

Last but not least, the BVARC Annual Awards Banquet was not held on January 18<sup>th</sup> as planned. Due to the low number of meals purchased, it was decided that it would be better to cancel and regroup. A preliminary survey went out with the bulk of the recommendations – restaurant, Friday evening, and steak/beef. A more detailed survey will be sent out sometime in February so make sure your recommendations are known.

As I said, it is a short article. Hope to see everyone at the Greater Houston HamFest!

73,  
N5VCX

# Radiant Barriers and Roof Mounted Antennas<sup>1</sup>

By Larson E. Rapp, WIOU

There are lots of older homes around Houston. Some are owned by Amateur Radio fans. Homes like these are often purchased by hams because they do not have restrictive covenants on the property, especially on antennas.

I was recently looking through some old QST antenna articles when I came across this scholarly paper on vertical antennas by Larson E. Rapp, WIOU. As a student of Larson's work over the years, I just had to send a copy to ARRL HQ for authentication. Now, If I could just find a copy of Carmichael's Equation!

Carmichael's Equation is the principal calculation for optimum antenna height over a roof or radiant barrier. The effect of the radiant barrier is decreased by the square of the distance from the roof to the antenna according to Carmichael's Equation. It's complicated due to the fact that the shingle material and plywood underlay have a capacitive coupling effect on the antenna. So, it is important to consider the reflective effects of both the ground plane material and the coupling of the plywood and shingle sandwich as well as the radiant barrier.

That's where the Schmidt number becomes a significant factor in Carmichael's equation. The Schmidt number is a function of the material composition and its thickness. It is increased in direct proportion to the material thickness. So, the higher the Schmidt number, the higher the antenna must be to escape the effect of the roof shingle or radiant barrier.

One can look up the Schmidt number for simple materials in any Table of Materials. However, when you have a roof that is made of complex sandwich of radiant barrier and plywood and roof shingle and/or an angled roof surface, you must calculate the integral of the entire roof volume including the thickness of each layer to arrive at the proper reflective value of the roof.

This value, "r" is key in calculating the Schmidt number. When there is a layer of plywood between the shingles and the radiant barrier, the three materials are all factors, which are significantly more important than the capacitive effect of just the shingles or the radiant barrier by itself with the ground plane itself. Any value of "r" that is less than  $10^{-3}$  doesn't really matter anyway.

Ignoring this interaction can result in poor antenna performance as noted in Carmichael's paper, "The Effect of Antenna Height on Roof Mounted Antennas" published in Proceedings of the IEEE, April 1966. Carmichael's work was later confirmed by experiments conducted a year later by noted amateur, Larson E. Rapp, WIOU in his paper published by QST in April 1967. Rapp was, of course, famous for his experimental work advancing ham radio in many areas, especially propagation.

Reporting from the Dark Side  
Ron Litt, K5HM

<sup>1</sup> Originally published by Larson E. Rapp, WIOU in the April 1967 issue. It was discovered amongst his unpublished papers in his former home at Kippering on the Charles, Ma. just off Route 128.

This month a new technical column will start called "The Solar Report". It will feature news on how solar cycle 25 is progressing relative to how it looked back in 2021, when the current cycle was starting its upward climb.

The monthly articles will also include a topic of interest to ham radio enthusiasts. This month, for example, the topic will be "Auroras". Have a look at our tech pages (<https://bvarc.org/home/tech-downloads/>) under The Solar Report and see what the latest article is all about.

Here's to you enjoying our hobby and hoping that you will enjoy these brief and informative articles.

Good contacts & 73!  
Stephen (W2WF)

# The Radio Hotel – The Math Behind the Curtain

Or...Something fun to read on a cold winter's day

by Rick W5RH

“Pay no attention to the math behind the curtain.” A paraphrased quote from the Wizard of OZ movie.

And most times it's only necessary to pay attention to the math in front of the curtain. But, maybe we should have a quick peek behind, just a bit. So, what am I talking about? I am not talking about 468 / F MHz giving you the length of a ½ wl dipole. No, not even close. I am talking about the mathematical equations that define RF itself or the different modulation schemes or even the design equations for building coaxial cable. Maybe you are in-tune with higher math (Calculus or Differential Equations). For me, not so much anymore, however, if you are mathematically tilted in that direction, hats off to you. But, I bet 75% of the hams out there in ham-dom got to Algebra I and quit. Nothing wrong with that, just stating an assumed fact.

## So, what's behind the curtain?

Take coaxial cable for instance...the design and implementation of coax is completely based on equations, such as seen here. More at [RFCafé.com/references](http://RFCafé.com/references).

$$f_{cutoff} = \frac{7.51393}{\sqrt{\mu_r \epsilon_r} \cdot 2 \cdot (b+a)} \quad [in, GHz] \quad C = \frac{2 \cdot \pi \cdot \epsilon_0 \cdot \epsilon_r}{\ln\left(\frac{b}{a}\right)} \quad [F/length] \quad L = \frac{\mu_0 \cdot \mu_r \cdot l}{2 \cdot \pi} \cdot \ln\left(\frac{b}{a}\right) \quad [m, H]$$

Although we Hams typically don't need to know any of this, it is nice to know from whence our coaxial transmission line came. We tend to lean more toward the implementation properties i.e. Surge Z, loss and the operational effect of the length vs. frequency vs. load Z.

Now, how about the 4 most important, (but least understood), equations to anyone involved with anything to do with radio frequencies. Maxwell's Equations. Although these were not originally Maxwell's, as some were developed by other important physicists and scientists that we should all know about...Carl Gauss, Michael Faraday and Andre-Marie Ampere. Maxwell presented their equations in differential form, as seen below. These define the basis of why our radios and antennas tend to do what they do.

$$\nabla \times B = \frac{4\pi k}{c^2} J + \frac{1}{c^2} \frac{\partial E}{\partial t} \quad \nabla \cdot B = 0 \quad \nabla \times E = -\frac{\partial B}{\partial t} \quad \nabla \cdot E = \frac{\rho}{\epsilon_0} = 4\pi k \rho$$

Understanding them is a bit off of my radar, but reading the explanations is fascinating when you realize they were published in the late 1800's. Who would have thought back then that these discoveries and definitions would eventually lead to us hams plugging and playing a few bits and pieces purchased on-line from DX Engineering or Gigaparts and communicating around the world. Mind blowing!

If you do have inkling to understand a more detailed look at the mathematics of RF, antennas and transmission lines, might I steer you to a set of YouTube videos by a club member, Stephen Flowers, W2WF. His videos are excellent, but pure applied physics mathematics “at the undergrad freshmen

level” Stephen told me. Find all of his Quantum Radio videos at <https://www.youtube.com/@quantumradio/playlists>. Be sure to look in all the Playlists he has compiled, as some of the best derivations, or should I say, some of the more applicable ones for us Hams are located there.

If, however, you are a more in-print type of reader, I have a few books to reference you that might provide you with that behind-the-curtain peek at the basic mathematical definitions of our passion. Have a read of:

Electro-Magnetics -- John D. Kraus  
Fundamentals of Electric Waves -- Hugh Hildreth Skilling, Ph.D.  
Radio-Electronic Transmission Fundamentals – B. Whitfield Griffith, Jr.\*  
Radio Engineering – Frederick Emmons Terman

*\*Denotes my favorite. Best explanation of how and why an antenna Works, out of the many antenna theory treatises that I have read.*

[Note: These books are all circa 40’s, 50’s and 60’s, so I can assure you there are more modern texts available, but these are the ones in my library.]

Again I assert, just because I write about this math and theory and do try my darndest to try and understand it, please make no assumption that I can explain it to you at this level. I’ll leave that to people like W2WF. I just find solace in knowing that there are folks on the planet, past and present, like Stephen, who are many times smarter than I. And as the Cowardly Lion said so accurately in an audience with OZ, “Ain’t it the truth...ain’t it the truth.” HI HI.

Enjoy your hobby 73...W5RH

---

## JANUARY VE - FCC TESTING SESSIONS RESULTS

For the January 6<sup>th</sup> test session at Bayland Park - we had 5 candidates and conducted 8 tests.

New Licensee:

Bhatt, P. (Technician - KJ5DXM)  
Lopez, J. (Technician – KJ5DYG)

Upgrades

KJ5DOW (General)  
KJ5DOB (General)  
KJ5DKJ (Extra)

VEs in attendance – K5GOL, K5LJ, W5LIC, KG4NDS, NK5Q and WX5KR – **THANKS!**

Congratulations to All!

\*\*\*

The next BVARC test session will be **Saturday February 3rd** at 10:30am. **Pre-registration is required.**

For new licensees the testing fee, paid at the session is \$15. An additional \$35 license fee (totaling \$50) will be collected by the FCC separately for new, renewal and vanity calls. License upgrades **do not** pay the added \$35 fee, just the \$15 session fee.

### YOUTH LICENSING INCENTIVE PROGRAM

The ARRL has created a youth program (18 and under) to defray the licensing costs to a total of \$5 (deducting the \$35 increase and \$10 off the \$15 VE session fee). See: <http://www.arrl.org/youth-licensing-grant-program> .

Also, BVARC is implementing its own program for **youth** licensing.

We'll provide a **new VHF/UHF transceiver (Baofeng, limited supply)** at the VE session, to youth that successfully pass their Technician test. This is the result of a very generous donation (Dec. '23) from a BVARC member, THANKS!

**Bottom line, a young person for \$5, can walk into a test session and walk out with a new radio and a pending license.**

\*\*\*

Examination sessions are held each month, most times the first weekend of the month and usually on the same weekend as the Sunday BVARC Board meeting. These testing sessions are at the Bayland Park Community Center, 6400 Bissonnet St., Houston TX 77074.

Details for candidates are found at <https://bvarc.org/home/ham-radio-license-testing-houston/>

Pre-register to attend a test session at: <https://hamstudy.org/sessions/arrl/77008/inperson>

For questions, Email Mark Janzer, K5MGJ at ([k5mgj@yahoo.com](mailto:k5mgj@yahoo.com)).

# The Greater Houston HamFest Presents The ARRL West Gulf Division Convention



## Tickets:

On-line - \$10

At the Door - \$15

Children 12 and under,  
Scouts, Military,

& First Responders

In Uniform - FREE

Tables - \$25

Tailgate - \$5

## When

Friday, March 1, 2024

12PM - 8PM

Saturday, March 2, 2024

8AM - 3PM

*Door Prizes Every half hour  
starting at 9:00 am!!*

## Where:

Fort Bend County Fairgrounds  
4310 TX- 36 S, Rosenberg, TX 77471  
29°31'12"N 95°48'38"W

## Sponsors/Vendors

- \* Ham Radio Outlet
- \* The SignMan of Baton Rouge
- \* ABR Industries
- \* EPO
- \* River Oaks Car Stereo
- \* *More to Come*

## Raffle Prizes

Single Ticket - \$5,

Five Tickets - \$20

## Guest Speakers

John Stratton, NSUS  
ARRL West Gulf Division Director

Riley Hollingsworth, K4ZDH  
ARRL Volunteer Monitor Program  
Radio Programming Classes  
Testing & Balloon Launches  
Overnight camping available  
Free Shuttles to your car



## Contact:

Chairman: Mike Hardwick, NSVCX  
713-826-6917



[FB.com/groups/HoustonHamfest](https://www.facebook.com/groups/HoustonHamfest)



[Twitter.com/HoustonHamfest](https://twitter.com/HoustonHamfest)

[www.HoustonHamfest.org](http://www.HoustonHamfest.org)

## Winter Field Day Great Success



**Check back next month for more on Winter Field Day.**



## Where in the World is . . . Grand Fenwick (FWK) CQ Zone 14

The Duchy of Grand Fenwick is so rare that its name does not appear on any DX entity list anywhere. It is decidedly obscure but geopolitically important. The tiny nation is a constitutional monarchy previously ruled by Grand Duchess Gloriana XV who some believe bears a striking resemblance to the actor Peter Sellers. Grand Fenwick is no more than five miles long and three miles wide and lies in a fold in the Northern Alps. Most of the inhabitants live in the City of Fenwick, which is also home to the only bar/hotel/restaurant in the country, the Gray Goose Pub.



Figure 1 Duchess Gloriana XV, Ruler of Grand Fenwick

Due to its location in a deep valley between France and Switzerland, propagation does not favor contacts with Grand Fenwick, even in the best of times. Hence it is one of the most sought-after DX locales on the planet.

The primary industry in Grand Fenwick is the export of the local wine, Pinot Grand Fenwick. The annual export volume is kept deliberately small so as not to disrupt the balance of power in the world. In 1962, the distilled byproduct of the grape was found to be an extremely powerful agent in the

manufacture of rocket fuel. Hence there is plenty of vintage for local consumption.

In 1955 after a series of diplomatic advances, Rapp went to Grand Fenwick to make the final arrangements for a serious DX-pedition. After months of planning and preparation, the DX-pedition was canceled when the tiny nation abruptly declared war on the United States during what became known as the Glorious War of 1955. During apparently cordial negotiations with Grand Fenwick officials, Rapp was suddenly declared an enemy alien and thrown into a dungeon in Fenwick Castle.

The details of the conflict are buried in the marginal notes of history, but Grand Fenwick won a total and bloodless victory against the United States. For some years Rapp lay forgotten in that deep dungeon in the castle. His only companion was his jailer, who befriended Rapp. The jailer shared his food with Larson which kept him alive but forced him to play tic-tac-toe marathons every night.

To maintain his sanity, Rapp posited several radical approaches to current and future problems in the hobby. These would appear in later years in *QST* as *A Radical Approach to VFO Design*, *A Compact All Band Antenna* and the *QS-56 Communications Receiver*.

Eventually, rumors of a prisoner in the castle dungeon reached Duchess Gloriana. She was furious about Rapp's imprisonment. Immediately, she freed Rapp and forced the jailer to learn how to play Chess and Pong as a punishment.



Larson was so debilitated, the princess decided that he should be installed in her own quarters in the palace till his health recovered and took charge of his care personally. During this lengthy process the couple drew quite close to each other and developed an intimate relationship.

After several years, Rapp decided it was time to return to his laboratory at Kipperington-on-the-Charles off Route 128. They had one final intimate evening. Nine months later, Princess Gloriana XVI was born and rules Grand Fenwick today.

No one at the castle would confirm the rumors that anything untoward happened that evening but Gloriana XVI bears a striking resemblance to Larson E. Rapp. Too bad there are no photos of Rapp extant to compare. However, the FCC (Fenwick Communications Commission) recently announced that Princess Gloriana XVI was awarded a Novice license.

The Duchy is not a member of the ITU. Having defeated both the USA and the USSR in the Glorious War of 1955, Grand Fenwick believes they are free to choose any call sign prefix they wish, resulting in the decidedly different, FWK. As victors they claim the right to be left alone and are not bound by any international conventions regarding radio or anything else for that matter.

Reporting from the Dark Side, Ron, K5HM

## An Age-Old Question From Shakespeare's MacBeth Who Asked,

# “What is That Noise?”

By JP Pritchard, K5JPP

I happened to be at my back gate recently when the lawn crew arrived to clean up the yard and I was bowled over by the extremely loud blower and edger that moved into the back yard in hands of focused men, one after the other.

Wow! That was really loud.

Good news is, I only had to go into the house to get away from it. But when I'm on the air for the BVARC ragchew Wednesday nights, there's nothing I've been able to do so far to get away from extreme noise on 75 meters, and to a lesser extent 40 meters.

My main antenna is a SteppIR Small Vertical mounted on my roof, and it's always been prone to high noise levels in the S6 and S7 range on 75 meters+. Of course, higher noise levels are among the downsides to vertical antennas. And it was that constant noise level that motivated me to find a transceiver with the best possible noise reduction.

To that end, I purchased an Anan-7000DLE MKII transceiver from Apache Labs. I have been ecstatically pleased with this unit's ability to cancel out a significant amount of RF noise. But it recently met its match.

Starting just before the end of the year, the constant noise level across 75 meters in my neighborhood went to S9+10 and sometimes +20. It was as if the radio gods had ginned this up for me, just for a laugh. (Clearly, I'm not laughing).

I've reached out to BVARCIAN experts and was directed to seek out Center Point Energy's resident noise squelching specialist named Patrick. Patrick listened to my impassioned pleas for help and said he would go right to work on it using a special noise sniffing receiver with a handheld Yagi antenna.



About a week later, he found a broken lightning arrestor on a power pole about a baseball throw away from my house. He also spotted a couple of “dead end bells” on the same pole that didn't look right to him. He took pictures and said he'd reported the problem for repairs. No word on a solution to those issues so far and the noise is still ever present.



I also informed him of an apparent anomaly in one of the feed lines to my house and an extremely noisy issue a few blocks east of my home at Stein Park, a location I had to give up on as a throw-down (up really) POTA antenna testing ground. I haven't heard more on any of those issues yet, other than Patrick's word that he would check it out.

Now I don't have any expertise to pass on to you regarding this issue, but I do have a purpose in sharing my dilemma with you. I have learned that electrical system noise issues (not necessarily from the power distribution grid) are as common as jellyfish on the beaches of Galveston in late summer. It's just part of the ham experience for an awful lot of us urban residents and tracking down the problem is seldom easy.

The noise you experience may be in your own home or coming from a neighbor's solar energy inverter. There have been countless articles over the years in QST and other ham publications on how to ferret out the source of an RF noise problem. I think I'll just have to view this problem as yet another ham challenge that teaches this old dog some new lessons, hopefully coming out on the other side as smarter and more confident.

I'm striving to have more information and maybe a solution to tell you about by the time the March issue of the BVARC Beacon comes to an email address near you. 'Til then, would you please hold it down! I'm trying to listen to the radio.

# ***Board of Directors Meeting Minutes***

January 7th, 2024 5:00 PM Via Videoconference

## **Board Members Present:**

- President – Mike Hardwick – N5VCX
- Vice President – Kori Rahman – WX5KR
- Treasurer – Dave Ely – N5EKW
- Corresponding Secretary – Jeff Greer – W5JEF
- Recording Secretary – Sean Linkenheimer - N5LNK
- 1 Year at Large - Daphne Rawlinson – K5VQY

## **Guests Present:**

- Anthony W5LIC
- Rick W5RH
- Ted Lasso II
- Chris AC5CM

## **Meeting:**

- Establishment of a Quorum: Yes
- Call to Order: 5:20 PM
- Club President's Opening Statement:
  - The President thanked those in attendance for taking the time to join the meeting.
- Emergency business:
  - Kori Proposed Terry Leatherland to serve as 2-Yr. at Large Director, 2<sup>nd</sup> by Sean. Kori reports Terry is happy to take the role. Passed by unanimous decision.
- Approval of Agenda:
  - Motion to approve Agenda made by Jeff, 2<sup>nd</sup> by Sean. Passed by unanimous decision.
- Approval of Minutes:
  - Motion to approve Minutes made by Jeff, 2<sup>nd</sup> by Sean, Passed by unanimous decision.
- Approval of Treasurer's Report:
  - Dave presented a report. 94 new members in 2023 (334 total). Motion to approve report made by Jeff W5JEF, 2<sup>nd</sup> by Sean. Passed by unanimous decision.
- Corresponding Secretary:
  - Jeff presented a report. Hamfest approaching we need 4-5 card readers for transactions. Club has 1 already. More to be purchased.
- Old Business:
  - Programs:
    - Annual Awards Banquette
      - 37 meals prepaid. Minimum for caterer has not been met. Previous year was 55 prepay. The banquet will be scheduled for after Hamfest. Reasturant venue to be considered in lieu of caterer.
  - Committees:
    - No Reports
- New Business:
  - February Meeting – Home Brew Night
  - Kori presented POTA report. Motion to approve \$2,000 a year budget by Kori, 2<sup>nd</sup> by Jeff. Budget of \$1,000 thru June 2024 approved by unanimous decision.
  - Winter Field Day - January 27-28
- Next BoD Meeting Date: February 4th at 5 PM on Zoom.
- Adjournment: 7:23 PM



## February 2024 – Amateur Radio Events Calendar

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
<b>P</b> : Pub Svc Net 8 PM Mondays <b>Q</b> : QuestionAIR Net 7:30 PM Tuesdays		<b>R</b> : Rag Chew 7 PM Wednesdays <b>S</b> : Stir Crazy Net Noon Mon-Fri		1 <b>S</b>	2 <b>S</b>	3 FCC Testing Bayland Park 10:30 AM
4 BVARC Board Mtg 5 PM – Zoom	5 <b>P S</b>	6 <b>Q S</b>	7 <b>R S</b>	8 <b>S</b> Mtg: Fire Dept 7:30 PM	9 <b>S</b>	10
11	12 <b>P S</b>	13 <b>Q S</b>	14 <b>R S</b>	15 <b>S</b>	16 <b>S</b>	17
18	19 <b>P S</b>	20 <b>Q S</b>	21 <b>R S</b>	22 <b>S</b>	23	24
25	26	27	28	29	March 1-2: Greater Houston HamFest	

### BVARC Rag Chew Net

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

01/03/24, K5LKJ (NCS), K5LJ, WW5PA, W5TKZ, W5ALW, K5RBC (Lake Jackson), KG5ICR, KI5HOC, W5VOM, AA5OA (Percy, AR), W5LIC (Bellaire), KI5RLZ (Channelview), W5RH. (13 Check-Ins)  
 Solar Cycle 25: SFI = 142, SN = 63, A = 8, K = 2 / Band Rpt: GOOD

01/10/24, K5LKJ (NCS), K5DBL (Manvel), K5LJ, KG5ICR, K5IZO (Jasper), N5VCM, W5ALW, W5VOM, K5TPC (Bellaire), N5VCX, WA5CYI, W5TKZ, K5RBC (Lake Jackson), KI5SKL, W5RH, KS5V. (16 Check-Ins)  
 Solar Cycle 25: SFI = 176, SN = 175, A = 6, K = 1 / Band Rpt: GOOD

01/17/24, K5LKJ (NCS), KG5ICR, K5RBC (Lake Jackson), WW5PA, K5LJ, W5VOM, K5TPC (Bellaire), K5DBL (Manvel), W5TKZ, KI5UKI (Dequincy, LA), W5ALW, N0HW, W5LIC (Bellaire), W5RH, W2WF, SWL James A., AA5OA (Percy, AR). (12 Check-Ins)  
 Solar Cycle 25: SFI = 174, SN = 158, A = 5, K = 1 / Band Rpt: FAIR

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

Net conditions have been fair to good this month. Fire up the rig and learn what others are doing and share your experiences. Come join in the conversation each Wednesday evening. Regards. John K5LKJ

### Advertising in the BVARC Newsletter

Rates are as follows: Business card sized ads are \$10 each or 6 monthly installments for \$50; Half (½) page - \$25 per month for \$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.



River Oaks Car Stereo

Since 1990  
 4129 Richmond Ave  
 Houston TX 77027  
 713-626-7627 -  
[help@riveroakscarstereo.com](mailto:help@riveroakscarstereo.com)  
[riveroakscarstereo.com](http://riveroakscarstereo.com)

NUSK - Eddie  
 KBSYTA - Dwayne  
 KRSOBB - Eddie Jr  
 KFSRKJ - Blake  
 WSLIC - Anthony

**Ham Exam Answer: C. Slow scan TV transmissions are restricted to phone band segments.**



### 2024 Club Officers

- President (2024-2025)  
Michael Hardwick N5VCX n5vcx@att.net
- Vice President (2023-2024)  
Kori Rahman WX5KR kori113@gmail.com
- Recording Secretary (2024-2025)  
Sean Linkenheimer N5LNK sean.N5LNK@gmail.com
- Corresponding Secretary (2023-2024)  
Jeff Greer W5JEF greerjw@hotmail.com
- Treasurer (2023-2024)  
David Ely N5EKW davidely@prodigy.net
- 2 Year At-Large Board Member A (2024-2025)  
Vacant
- 2 Year At-Large Board Member B (2023-2024)  
Drew Dasher N1ER adasher18@hotmail.com
- 1 Year At Large (2024)  
Daphne Rawlinson K5VQY daphne\_rawlinson@hotmail.com

# 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 per year, with student dues \$10 per year, additional family members \$5 per member per year.

Club meetings are both in-person and via Zoom on the 2<sup>nd</sup> Thursday of each month at 7:30 p.m. If you have signed up for the email reflector, you will receive notice and the attendance password, etc. It will also be on the website a few days beforehand.

BVARC amateur radio testing takes place typically on the Saturday before the 2<sup>nd</sup> 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 PM on the 146.94 (minus offset, PL 167.9 tone) repeater.

A "Stir Crazy Net" is also held weekdays at 12 Noon on the 146.94 (minus offset, PL 167.9 tone) repeater.

A rag chew net is held each Wednesday at 7 PM on 3910 KHz +/- 3 KHz.

The QuestionAIR Net is held every Tuesday at 7:30 PM on the 146.94 (minus offset, PL 167.9 tone) repeater.

To obtain information about joining BVARC or its activities, see the BVARC website: [www.bvarc.org](http://www.bvarc.org)

Other contacts: **BVARC President** Mike Hardwick N5VCX [n5vcx@att.net](mailto:n5vcx@att.net), **Newsletter Editor** Donovan Balli KG5BDZ [dballi@mail.com](mailto:dballi@mail.com), **Editor Emeritus** John Chauvin K5IZO [k5izo@yahoo.com](mailto:k5izo@yahoo.com), **Newsletter Printing, Assembly, and Mailing** Mike Hardwick N5VCX [n5vcx@att.net](mailto:n5vcx@att.net), Jeff Greer W5JEF [greerjw@hotmail.com](mailto:greerjw@hotmail.com), Gokhan Koralturk KG0KHN [gokkor@gmail.com](mailto:gokkor@gmail.com)

---

**VOLUME 48, ISSUE 2**

**FEBRUARY 2024**

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

ADDRESS SERVICE REQUESTED


**FIRST CLASS POSTAGE**

---

Board of Directors Meeting – 5 PM Sunday, February 4, 2024, via Zoom

BVARC General Meeting – February 8th, 2024, Community Volunteer Fire Department, 16005 Bellaire Blvd, Houston 77083

Greater Houston HamFest – March 1-2, Fort Bend County Fairgrounds, 4310 Hwy 36 South, Rosenberg, TX 77471



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