



BVARC BEACON

Newsletter of the Brazos Valley Amateur Radio Club

AMATEUR RADIO FOR SOUTHWEST HOUSTON AND FORT BEND COUNTY



VOLUME 48 ISSUE 12

DECEMBER 2024

General Membership Meeting December 12th at 7:30 PM

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

Come join in Homebrew Night and BVARC's Holiday Party!

BVARC 2025 Elections

Our November meeting was the annual chili supper and elections. As always, the BVARC Food Team did a great job on the refreshments and if you went away hungry, that would have been your fault and not theirs! Thanks again to the Food team for an excellent job.

The elections this year had five positions with terms that ended. The positions that were open were Vice President (2025-2026 term), Corresponding Secretary (2025-2026 term), Treasurer (2025-2026) term, 2-Year Director (B) (2025-2026 term), and 1- Year Director (2025 term). The election committee, chaired by Chuck Hale, KF5UXP, submitted the following slate of candidates: Kori Rahman, WX5KR for VP; Jeff Greer, W5JEF for Corresponding Secretary, and Dave Ely, N5EKW for Treasurer. Scott Medbury, KD5FBA, made a motion to vote by acclamation, which was done. The membership then elected Kori, Jeff, and Dave unanimously.

A request was then made for members to step up to fill the two open director positions. Two club members stepped up to fill the positions: Robert Polinski, KD5YVQ stepped up for the 1-year position and Kirc Breden, N5XJB for the 2- year position.

I want to thank Kori, Jeff, and Dave for continuing their positions on the Board. I really appreciate Robert and Kirc for jumping in and filling in the open positions. And finally, I want to thank Drew Dasher, N1ER and Daphne Rawlinson, K5VQY for their time on the board. – N5VCX

The Prez Sez

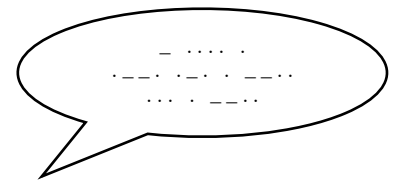
The end of the year is just around the corner. The weather is getting colder, and the VHF ducting is happening more often in the morning. (I wonder if someone could come up with a Christmas song with VHF ducting in it!)

Hopefully, everyone has put their wish list for Santa Claus to deliver on Christmas. (like an ICOM 7610 or Elecraft K4 or even a Flex 6700!)

The November general meeting went well with the annual chili supper and elections. Everybody had plenty to eat and all the positions were filled. Check elsewhere in the newsletter for more information. I do want to say thanks to WX5KR, W5JEF, N5EKW, N5XJB and KD5YVQ for stepping up to be on the BVARC Board of Directors.

The December meeting will be a regular BVARC members' event called Homebrew night. And as I have said in the past, it is not the best beer you can make but the best homebuilt equipment you can build. So, bring out the all-band hand-held radio that fits in your pocket and has 100 watts of power. There will be a prize for the most unique item constructed.

Do not forget the Greater Houston HamFest coming up on March 7th and 8th, 2025. It will be held at the Fort Bend County Fairgrounds. More information will soon be on houstonhamfest.org website.



As some of you already know, the 146.88 WR5AAA repeater is back on the air in Houston. Due to the kind donations of Bill Cordell, W5VOM, the repeater is now back at the 1500-foot level of one of the tall towers in Missouri City. So, check the repeater out. It has the standard offset with a 167.9 tone. Hope to hear you on the new machine.

Always check out the club website for more information on events.

So, remember the holiday season is a time to express gratitude and appreciation for the important people in your life. Take this opportunity to thank them for their love, support, and friendship throughout the year. I want to wish everyone a great Christmas and a wonderful New Year. 73, N5VCX

Greater Houston HamFest March 7th and 8th, 2025

Mark your calendars for the 22nd Annual Greater Houston HamFest in March, 2025. Planning for the event has started and I am looking for people to help at the event. If you would like to help, please contact me and let me know. The event not only supports BVARC but it supports amateur radio. I need about eighty volunteers to put the event on, so line up now before it gets too crowded.

Remember the GHF is for you and the hobby. By helping out, the support you provide helps the club can the hobby continue. If you need more information, please drop me an e-mail at n5vcx@att.net or give me a call at 713-826-6917. Thank you for your support.

Mike Hardwick, N5VCX, Event Co-Chair, Greater Houston HamFest

BVARC Newsletter

After being absent for several months, the printed version of the BVARC Beacon returned with the November edition. The printed version did not go out for several months due to changes at my work schedule and traveling for family. However, this month's edition should be hitting your mailbox early next week except for members that opted out of the printed version.

To get the printed version of the newsletter sent out, it requires a production team. The team must fold, seal, stamp and label the newsletter so it can be mailed. This process takes anywhere from 8 to 10 hours to do 300 newsletters. Over the years since Cameron Mitchell assembled the newsletter, we have had John Chauvin to JP Pritchard to Daphne Rawlinson to yours truly putting the newsletter together and mailing it (I know I missed several people on this and I apologize for that). I want to thank all of them for their hard work putting the newsletter together over the years.

So, with my work schedule changing I am looking for an assembling team to continue assembling the printed version of the Beacon. There are many pros and cons on why have a printed version and all of them have been discussed. **However, if an assembly team cannot be found over the next three months, the printed version will be discontinued with the March edition.** This will bring the 47-year history of the BVARC printed newsletter to an end. It is unfortunate that it has come to this but if a team cannot be found to assemble the newsletter, the newsletter will only continue in the on-line format only.

I do want to acknowledge a group of people that helped assemble the November newsletter. Without their help last month, the newsletter would have not been mailed out. So, I want to thank the following people for their assembly of the November newsletter.

Dusti Huie, AI5ER – Brady, Texas Lewis & Rita Harris – Beaumont, Texas
Gerald Richmond, N5ZXJ – Temple, Texas - President Temple Amateur Radio Club
John Worthen – KF4ZPI - Abilene

Hopefully BVARC members will step forward to build a team to continue the half-century tradition. It would be a shame to have non-members upstage BVARC members on such a time-honored function of the club.

Field Day 2024 – We’re # 2. We try harder

Remember back in the late 60’s and the TV ads for the Avis car rental company touting that they were #2 versus Hertz being # 1. Avis turned their being #2 into a positive marketing message with “We’re number two. We try harder”. Our joint, quad club BVARC, TDXS, KARS and Uof H event at Duhacsek Park did just that: we tried harder. A very positive marketing and operational message to our club members and the Field Day participant community.

Field Day rules changed a few years ago. Final scores are now a composite of the major club or group score with the addition of home or other single op stations designating their score to be added to the club score for an aggregate total. Our Duhacsek Park 10A station’s score, operating as **KK5W BVARC Club** was boosted by the addition of 12 member stations designating BVARC as their club. (Unfortunately, the ARRL score report did not provide a who’s who listing of those 12 stations.) But a big thank you to all 12 is due, as you will see below.

The QST December 2024 ARRL Club Category List scores had **10A BVARC as #5 at 20,604 points**. Not too shabby an effort at just that. Potomac Valley ARC had us beat at 36,542 points, along with the Florida Contest Group, Huntsville ARC and Arizona Outlaws Contest Group running 2,3 and 4 respectively. However, adding the additional home station scores for the aggregate brought **BVARC up to #2 with 28,442 points**. Potomac Valley’s total score was 66,058, so they remained #1. But the others fell short with 25,602 being the #3 position. Our 12 home stations added 7,838 points, a 38% boost. A most excellent finish.

A very large THANK YOU goes out to the 130+ folks who did try harder and helped to plan, execute, participate, make, serve, erect, operate, eat, set-up, configure, clean-up, dismantle and submit our 2024 Field Day effort. It was yet another excellent Field Day all around for our quad club group. We will continue to try harder and again strive to be #2 (or #1) in 2025. So don’t miss the opportunity to join in the fun next June.

By Rick W5RH

Net Control Operators Needed!

With 350 members, Brazos Valley Amateur Radio Club is the largest club in Houston and the second largest in Texas. A club of this size needs the support of its members to help with various functions to keep the club functioning. There are many positions that a member can do to help with the club from serving on the board of directors to coordinating events to helping with the Greater Houston HamFest. However, one of the easiest ways to help the club is to serve as NET control on the club’s different NETS. If you are interested on helping and being a NET control, please let me know. There are many openings on the Monday night NET, and the Stir-Crazy NET and I even bet John, K5LKJ would let you take a shot at the Rag Chew NET.

If you would like to be NET control, let me know so we can put you in the driver’s seat. There are many different time slots to choose from so throw your name in the hat to help now.

So set some time aside to help the club and support amateur radio. You can contact me at n5vcx@att.net or call me at 713-826-6917. 73, N5VCX

Waves & Coffee – The Finite Dipole antenna

The math behind the halfwave dipole antenna

By Stephen W2WF

This is the last installment of this series where we'll derive the equations for the Finite Dipole antenna. Let's recall the previous steps of the journey that got us to this point:

Infinitesimal Dipole

Small Dipole

Finite Dipole

“Hertzian Dipole antenna” → “Small Dipole antenna” → “Finite Dipole antenna”

$$L \leq \lambda/50$$

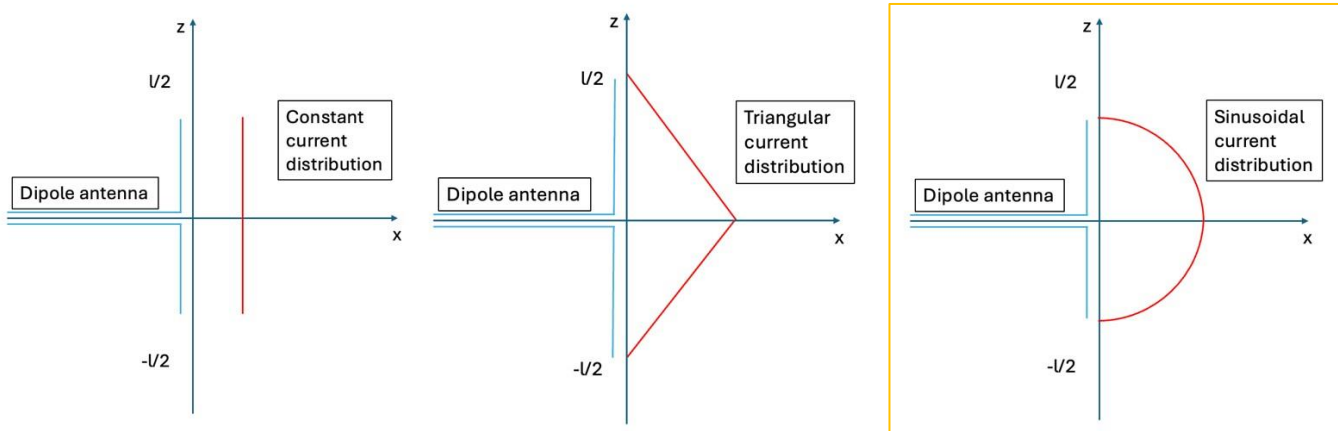
$$\lambda/50 \leq L \leq \lambda/10$$

$$L \sim \lambda$$

Current is a constant

Current approximates a half sine wave

Current is a half sine wave



Our journey started by studying an idealized antenna called the Hertzian dipole, which uses a constant current distribution. Next, we discussed the more realistic, but still idealized case where the current distribution was a triangular current distribution. Now, we'll finish off the series by switching our model to use a realistic sine wave current distribution.

As before we'll go from the vector potential **A** to the Magnetic field and then to the Electric field. We'll skip much of the math details so we can focus on the physics. Still, the payoff will be considerable. We'll get the full expressions for the **E** and **B** fields and see that they contain this weird “cosine of a cosine” term.

Finally, we'll look at the very interesting case when the wavelength is $\frac{1}{2}$ the length of the antenna. That is, we'll get the expression for the **half wavelength dipole**. If you want to read on, the rest of this article is at this link: <https://bvarc.org/home/tech-downloads/>.

Brazos Valley Amateur Radio Club Minutes

November 10th, 2024 @ 5:00pm via Video Conference

Board Members

President – Mike Hardwick – N5VCK	Vice President – Kori Rahman – WX5KR
Recording Sec. – Sean Linkenheimer – N5LNK	Corresponding Sec. – Jeff Greer – W5JEF
Treasurer – Dave Ely – N5EKW	2 Year At Large – Drew Dasher – N1ER
2 Year At Large – Terry Leatherland – K5PGF	1 Year At Large – Daphne Rawlinson – K5VQY

Board of Directors Meeting

- ❖ Establish Quorum - Established
- ❖ Call Meeting to Order - 5:06
- ❖ Opening Statement(s) – Thanks for joining!
- ❖ Emergency Business - none
- ❖ Agenda Review - approved
- ❖ Treasurer’s Report - approved
- ❖ Corresponding Secretary’s Report - reported
- ❖ Old Business
 - Greater Houston HamFest – Space reserved. Can get 100% refund up to 45 days out. \$10K spend approved; \$8-12K further funding to be requested at a later date.
 - Next Houston POTA – Sat, Nov. 16 at Brazos Bend State Park. 10 a.m.-5 p.m.
- ❖ Programs
 - November – Elections and Chili Supper; Chuck Hale, Scott Medbury, and Tom Larsh to manage elections. 5 BoD positions on ballot.
 - December – Homebrew Night
- ❖ Committees
 - Historical Archives
 - By-Laws
 - Finance
 - Events and Membership
 - Food Team
 - Club Website
 - Newsletter
 - Parks on the Air
 - Elmer/ SME
 - Museum Ships Wknd
 - Field Day
 - Greater Houston HamFest
 - GHHF Website
 - Banquet
- ❖ New Business
 - Bayland Community Center after Dec. difficult to book. (45 days prior max.)
 - Elections – Recording/Corresponding Secretary positions may be combined beginning 2025.
 - Houston Christian Univ Radio Club Alliance – Terry to be trustee and adjunct speaker/professor. Possibilities for coordination with BVARC.
- ❖ Next Meetings - Pursuant Article V Section G #1 of the Club By-Laws
 - Dec 8th, 2024 Board Meeting @ 5:00 pm via Zoom
- ❖ Closing Statement(s)
- ❖ Meeting Adjournment – 5:58 p.m.



Ham Exam Question

Which of the following describes an emitter follower (or common collector) amplifier?

- A. A two-transistor amplifier with the emitters sharing a common bias resistor
- B. A differential amplifier with both inputs fed to the emitter of the input transistor
- C. An OR circuit with only one emitter used for output
- D. An amplifier with a low impedance output that follows the base input voltage



December 2024 – Amateur Radio Events Calendar

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2 P S	3 Q S T	4 R S	5 S	6 S	7 VE Testing 10:30 AM Bayland Park
8 BVARC Board Mtg 5 PM Zoom	9 P S	10 Q S T Brews w/ BVARC 6:30-10 PM	11 R S	12 S BVARC Mtg 7:30 PM, Homebrew Night	13 S	14
15	16 P S	17 Q S T	18 R S	19 S	20 S	21
22	23 P S	24 Q S T	25 R S	26 S	27 S	28 S
29	30 P S	31 Q S T	P: Pub Svc Net 8 PM Mondays R: Rag Chew, 3910 kHz, 7 PM Wednesdays		S: Stir Crazy Net Noon Monday-Friday T: 10-10 Int'l Local SHOT Net, 8 PM Tuesdays	

Chevron Houston Marathon is January 18-19, 2025, in downtown Houston. It's a great way to volunteer with your radio.

Winter Field Day is January 25-26, 2025, at Duhacsek Park in Sugar Land.

Greater Houston HamFest is March 7-8, 2025, at the Fort Bend County Fairgrounds.

The next **Brews w/ BVARC** will be on Tuesday, December 10, from 6:30 – 10 PM at No Label Brewing Company, 5351 1st St, Katy TX 77493.

BVARC Rag Chew Net

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

10/23/24, K5LKJ (NCS), KI5HOC, K5LJ, KB5CUS (Dallas), AA5OA (Pearcy, AR), K5RBC (Lake Jackson), WW5PA (Corpus Christi)(M), K5TPC (Tomball), N5BAA. (9 Check-Ins)

Solar Cycle 25: SFI = 176, SN = 94, A = 8, K = 1 / Band Rpt: FAIR

10/30/24, K5LKJ (NCS), K5TPC (Tomball), K5LJ, W5ICR, W4SFZ (League City), W2WF (Katy), KI5HOC, N5VCX. (8 Check-Ins)

Solar Cycle 25: SFI = 266, SN = 206, A = 12, K = 4 / Band Rpt: FAIR

11/06/24, K5LKJ (NCS), K5JPP, K5LJ, K5TPC (Tomball), W2WF (Katy), KI5HOC, W4SFZ (League City), W5RH, KI5WXW (T). (9 Check-Ins)

Solar Cycle 25: SFI = 245, SN = 169, A = 11, K = 2 / Band Rpt: FAIR

11/13/24, K5LKJ (NCS), K5LJ, W5ICR, AE5JU (Morgan City, LA), W5TKZ. (5 Check-Ins)

Solar Cycle 25: SFI = 150, SN = 109, A = 9, K = 1 / Band Rpt: FAIR

(M) = mobile (P) = Portable (R) = Relay

(RCS) = remote controlled station (T) = telephone check-in

Net conditions have been FAIR 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



River Oaks Car Stereo

Since 1990
4129 Richmond Ave
Houston TX 77027
713-626-7627 -
help@riveroakscarstereo.com
riveroakscarstereo.com

N5UK - Eddie
KB5YTA - Dwayne
KB5OBB - Eddie Jr
KF5RKJ - BLake
W5LIC - Anthony

CW Training Classes

Over the last few months, there have been several club members talking about learning CW. Even though it is no longer required for an Amateur Radio license, many hams have an interest in learning it. So.....

I asked John Whiteman, K5LKJ, to do an informal poll on the Stir-Crazy Net to see how many people would be interested in learning CW. There were several people that expressed interest in learning CW, enough that I feel a CW class would be something the club should start up.

Before the class starts though, I want to check with the rest of the club and see if the interest is there with the rest of the membership. If you are interested in learning CW and would like to attend classes, please drop me an e-mail at n5vcx@att.net and let me know. If there is enough interest, a class can be organized and started around the first of the year.

So let me know if you would like to dive into the world of Morse Code! 73, N5VCX

NOVEMBER VE - FCC TESTING SESSIONS RESULTS

For the November 9th test session, at Bayland Park - we had 1 candidate and conducted 2 tests

New Licensee:

Ucar, M (Technician) KJ5IVW

VEs in attendance – K5GOL, K4USN, K5LJ, and W5ICR – **THANKS!**

Congratulations to All!

The next BVARC test session will be in January 2025

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.

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).

Advertising in the BVARC BEACON

Business card sized ads are \$10 per month or six months for \$50.

Half page ads are \$25 per month, \$125 for six months, or \$250 per year.

Full page ads are \$50 per month, \$250 for six months, or \$500 for a year.

Upcoming Hamfests

3/7/2025 - 3/8/2025 Greater Houston HamFest

Rosenberg, TX

Brazos Valley Amateur Radio Club

<https://www.houstonhamfest.org>

2/7/2025 – 2/9/2025 Orlando HamCation

Orlando, Florida

ARRL Southeastern Division Convention

<http://www.hamcation.com>

Ham Exam Answer: D. An amplifier with a low impedance output that follows the base input voltage.

BVARC EATS

Saturday Breakfast 6:30 AM, IHOP Stafford 12725 Southwest Fwy, Stafford, TX 77477

Wednesday Lunch Bunch 11 AM to Noon, Luby's Cafeteria 10575 W Airport Blvd, Stafford, TX 77477

Brews w/ BVARC Tuesday, December 10, 6:30 – 10 PM, No Label Brewing Company, 5351 1st St, Katy, TX 77493

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 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 2nd 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 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 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.

To obtain information about joining BVARC or its activities, see the BVARC website: www.bvarc.org

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

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DECEMBER 2024

**BRAZOS VALLEY
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SUGAR LAND, TX 77487-2997
ADDRESS SERVICE REQUESTED**

FIRST CLASS POSTAGE

Board of Directors Meeting – 5 PM Sunday, December 8, 2024, via Zoom

General Membership Meeting – 7:30 PM Thursday, December 12, 2024, 16005 Bellaire Blvd, Houston 77083



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