BVARC BEACON

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

SEPTEMBER 2022 VOLUME 46 ISSUE 9

General Membership Meeting notice

7:00 PM, Thursday, September 8, 2022.

Community Volunteer Fire Department conference room;
16,005 Bellaire BLVD

The featured presentation is about "Popular Contest Software" and will be presented by several members. This is especially timely as the primary season for casual as well as competitive contests is in Fall. Relating to this, see the Editor's article herein re the fun upcoming Texas QSO Party.

Prez Says

Hopefully, everyone has been enjoying the showers we have had over the last few days. The area needs it and I know I need it. The rain is cooling things down and the moisture is helping, I hope, the line noise on the power lines. I have not checked my area yet but any reduction in the S10+ noise would be nice. Only a few more months to go to Christmas (the year has gone fast!) so everyone get ready for 2023.

The unofficial score the BVARC 2022 Quad club Field Day was 17,464. Rick Hiller, W5RH submitted the score to the ARRL and if confirmed, that will be the score for the year. Everyone did an excellent job for Field Day, and I want to thank Anthony and Kori for their demanding work.

Our annual BVARC Ice Cream Social was an enormous success. We had about thirty members come by for ice cream and treats at the Community Volunteer Fire Department conference room. We also had several of the firefighters on duty drop by for some treats. Daphne, Scott, and Luanne did a wonderful job on putting the Ice Cream social together so drop them an e-mail an let them know how you enjoyed it. Also, the number of gumballs was 313 and a friend of Larry Jacobson was the winner. Thanks again for everyone that showed up for the social and the challenging work for the crew.

Will still need people to help with the with the production of the newsletter. If you have 5 to 6 hours a month to spare and you would like to help produce the newsletter, give me a call. This is getting critical, and the positions need to be filled as soon as possible. Check elsewhere in the newsletter for more information.

In September we will have a program on the various kinds of software for logging. It will be a live meeting at the Community Volunteer Fire Department conference room as well as a Zoom meeting. The link for the meeting will be sent out the Monday before the meeting on the BVARC reflector.

The Greater Houston HamFest is moving forward and will be held on March 3rd and 4th. More details will be coming shortly on the schedule so keep checking the website and the newsletter. The biggest change for the GHHF is it will be the Texas State Convention. This honor is something we have worked toward for several years. So, if you would like to help, please contact me.

Hope to see everyone at the September meeting. 73, N5VCX

The BVARC BEACON – A Critical State

Some of you may know, there are two issues with printing the BVARC newsletter – costs and labor required to produce it. Costs have skyrocketed over the last year and it is getting harder to find volunteers for production. Many ask why we still produce a paper newsletter and fight with all those problems. The answer on these items is one simple answer – maintaining membership.

Many clubs that have had a printed newsletter and changed to an electronic one experience a decrease in membership. The ARRL talks about membership loss in their "club manuals." Even our illustrious editor witnessed a significant drop in membership at the Houston Astronomical Society (long after he was president) when they went from paper to electronic form. So, the question is, where do we go from here? Here are few possible options:

1. Stay as a paper publication only (and continue to have the same problems).
2. Change to an electronic publication only.
3. Do a combination of sorts by allowing members to opt out of a printed newsletter. The major problem here is that this does not help with the labor portion and the costs do not go down proportionally.
4. Find a benefactor that can pay the printing costs for the next 20 years. Keep in mind, that this does not alleviate the labor problems cited below so they must be resolved. I want to increase the visibility of the newsletter for the amateur community. I want it to be something that other clubs will jump on board and submit articles from the entire Houston area. I feel that having a printed document is more beneficial to the hobby as whole.

This a club issue. I would like input from the membership as to what you think should be a direction to go in. Send me an e-mail to N5VCX@att.net and let me know your thoughts. During a BOD meeting, a comment was made that only a few will respond to this request. I hope they are wrong.

The other challenge on the newsletter is to significantly increase the staff to that required to reasonably produce it. Whether it is electronic or printed we need people to help. We are also looking for several people to aggressively solicit and manage advertising. For the printed format we need 5 or 6 people to alternate handle logistics and getting the printing done and to fold, tape, label, stamp and mail them. No matter what direction we go in, we still need people to help with this endeavor.

Also, just to let everyone know, an anonymous donor has paid for the printing for the September newsletter, which is only temporary solution, so the cost issues still exist.

Let me know if you are interested in helping. The club needs your help.

Mike Hardwick, N5VCX
President
Brazos Valley Amateur Radio Club

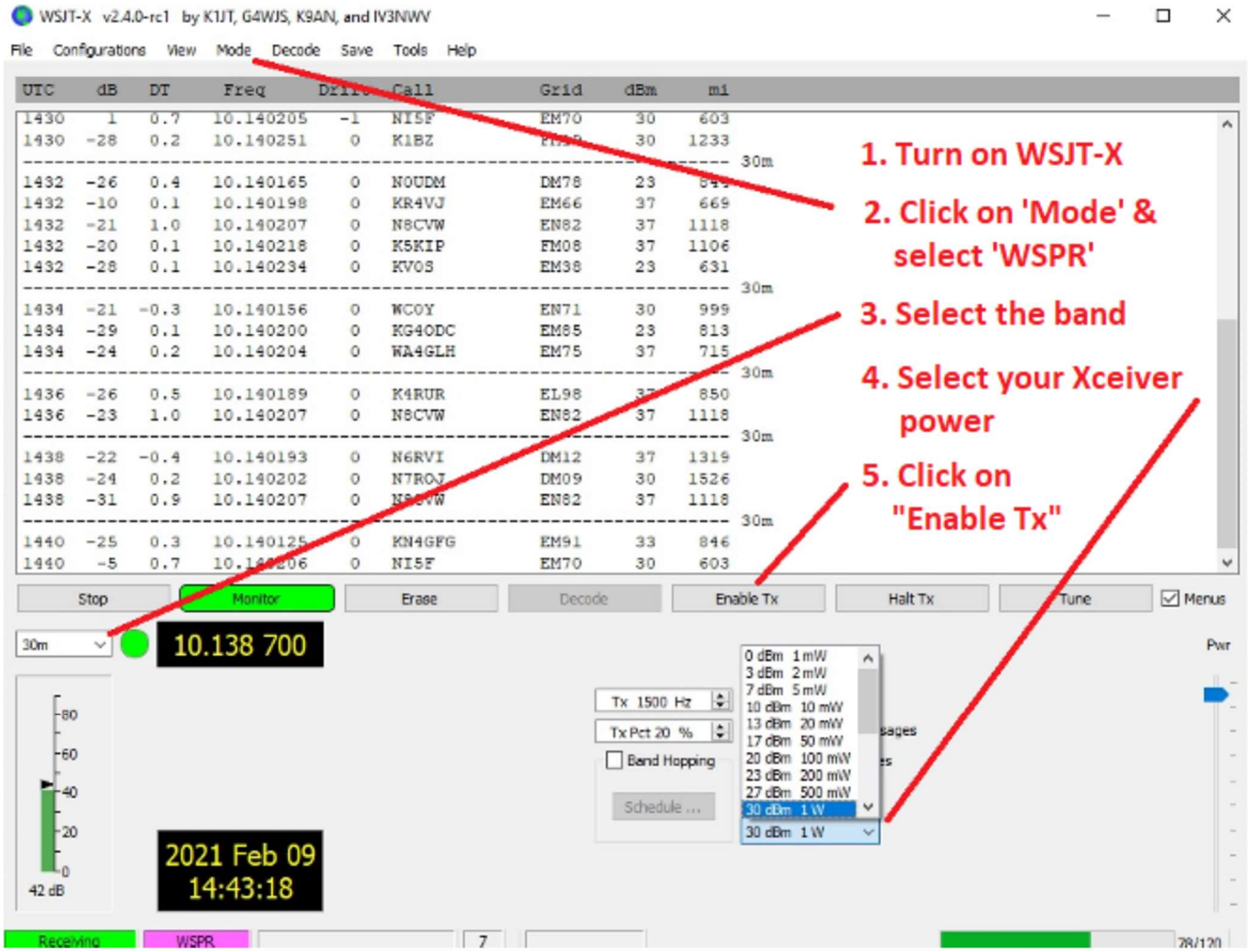
The Radio Hotel WSPR - A Whisper in the Aether

Guest visit by Steve Flowers - W2WF, of the Oak Forest Amateur Radio Club

WSPR is an acronym for "Weak Signal Propagation Reporter" (WSPR) and is pronounced like the word "Whisper". That name is very appropriate since the power level of the signals that it works with can be very weak indeed: 5 Watts, 2 Watts, and even 1 Watt. WSPR is a module of the WSJT-X program and was created by a team led by Dr. Joe Taylor - K1JT, Nobel Prize winning physicist who studies very weak signals originating from distant astronomical pulsars.

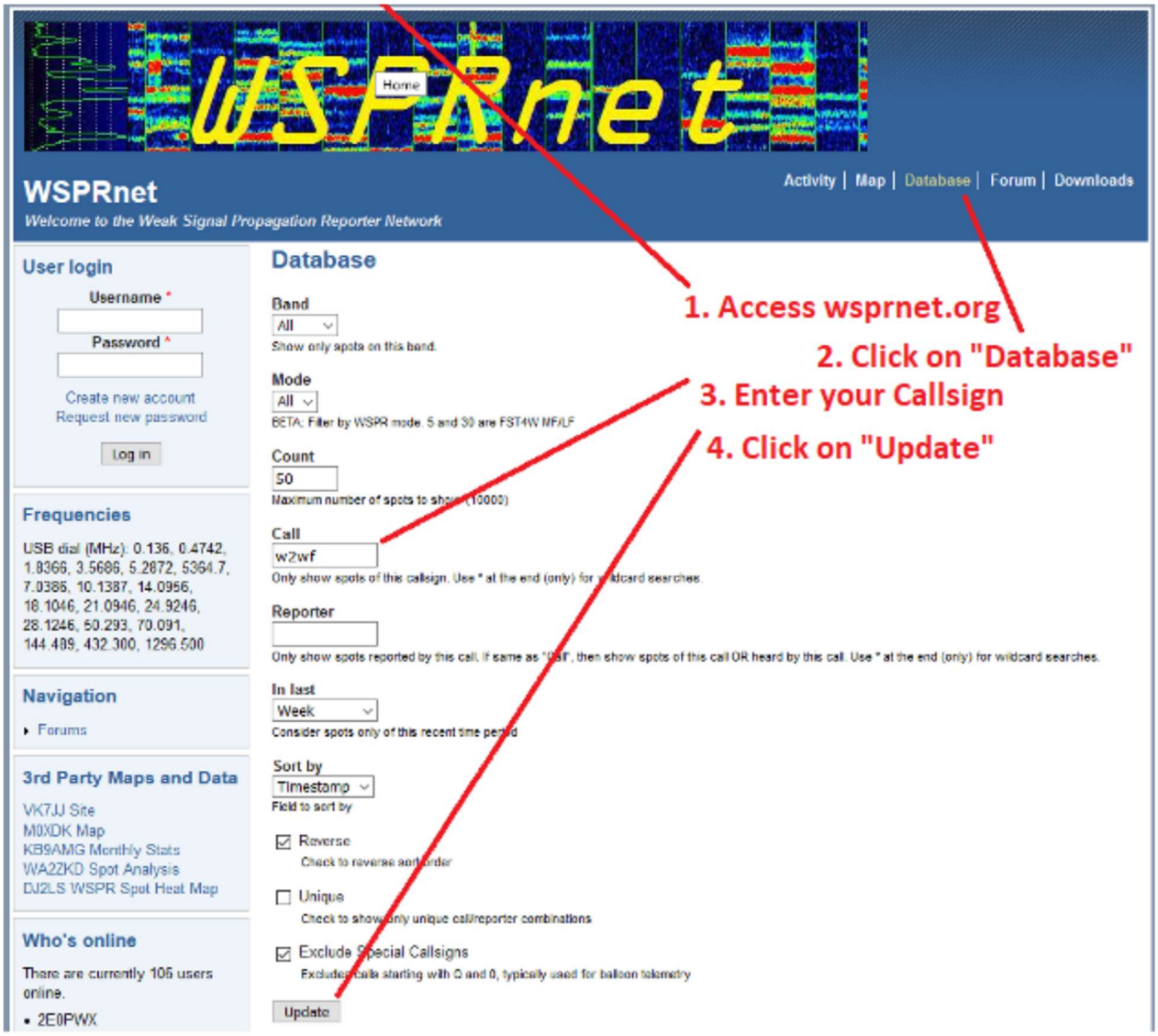
To use WSPR you need to first launch WSJT-X. I recommend that you use the most recent version of WSJT-X which at the time of this writing is version 2.3, though you can also use beta version 2.4. The next steps to take are: select Mode = WSPR, select the band that you want to operate in, select the power that you will be transmitting, and press "Enable Tx" to allow your transceiver to transmit. That's all.

The point to highlight is that your program will not set the transmission power in your transceiver, so you must manually set the power. This power level must be the same as what you've selected in the WSPR program. This way you'll be accurately reporting the power that your transmission used and that will be useful to those using this data for propagation research.



If your computer is connected to the Internet, then the WSPR program will automatically report the WSPR signals that your transceiver has picked up. Interestingly, the reports from stations around the world just like yours get stored in the central wsprnet.org database. So your station in effect becomes a node in the global WSPR network. All other connected stations report the following: your received signal strength, the callsign of the station that detected your signal, their Maidenhead grid location, and their distance from you. You'll be surprised at how far away you're being heard!

To access your station's propagation data you'll need to go to the wsprnet.org website, click "Database", enter your Calllsign under "Call", and click on "Update". This will return a page with your global signal reports!



WSPR doesn't support standard conversations, it only sends and receives transmissions to establish if propagation exists. The signal itself has a 6 Hz bandwidth and the WSPR protocol handles Signal-to-Noise (SNR) ratios of -28 dB in a total band width of 2500 Hz. Like other transmission modes of WSJT-X, time accuracy is very important so it's recommended that your computer is synchronized using programs such as Dimension 4.

73 and hope that you make good contacts! Stephen (W2WF)

Thank you, Steve, for a great introduction to WSPR. To read more about WSPR, see QST, Nov 2010 **WSPRing Around the World** by K1JT, Joseph Taylor

Enjoy your hobby 73 Rick W5RH

MINUTES

Board of Directors Meeting

Brazos Valley Amateur Radio Club

August 6, 2022 9:00 AM
Via Videoconference

Members Present:

Mike Hardwick N5VCX (President)
Jimmy Vance NA5D (Vice President)
David Ely N5EKW (Treasurer)
Jeff Greer W5JEF (Cor. Secretary, Rec. Secretary pro tem)
Scott Medbury KD5FBA (2 yr at large director)
Anthony Morones (2 yr at large director)
Sheree Horton (1 yr at large director)

1. Call to Order: The President called the meeting to order at 9:05 AM.
2. Establishment of a Quorum: A business quorum of Board Members was established.
3. Club President's Opening Statement: The President thanked those in attendance for taking the time to join the meeting.
4. Approval of Agenda: Agenda approved.
5. Emergency business. No emergency business.
6. Approval of Minutes: July meeting minutes were approved.
7. Approval of Treasurer's Report: Approved as presented.
8. Corresponding Secretary: Report approved as presented.
9. Old Business:
   - August meeting: ice cream social
   - September meeting: logging software
   - November meeting: chili supper and elections
   - December meeting: homebrew night?
   - January: banquet
10. New Business:
    - Ham radio night at the Space Cowboys: September 17
    - Hamfest planning meeting August 14
    - HARC (Houston Area Radio Clubs) mtg August 15
11. Next BoD Meeting Date: September 3.
12. Adjournment: Meeting adjourned 9:54 AM.

AUGUST VE - FCC TESTING SESSIONS RESULTS

For this Saturday session, the FCC-ULS was updated on the following Tuesday, less fee payments if required.

For Saturday, August 6th, we had 9 candidates and conducted 11 tests.

New Licensees:
Blackmon, F.C. (Technician)
Kane, A.C. (Technician) (youth+radio)
McIntire, J. (Technician)
Rodd, B. (Technician) (youth+radio)
Roman, M. (Technician)
Vitulli, R. (Technician)

Upgrades:
KI5WNN (General)
KI5CAH (General)
KD7ZC (Extra)

Congratulations to all!

VEs in attendance – K5GOL, K5LJ, KF5BMZ, WX5KR, KJ5EMP, W5LIC and WM5N

The September 2022 QST has a roster of the ten top VEs by session count.
The overall counts of the top dozen BVARC VE team members are:

AK5G: Randy Pollard	240	**N5KT**: Gerald Doucet Sr.	38
N5DTT: James H Burrough Jr	232	**KF5BMZ**: Pete Slater	16
K5LJ: Larry Jacobson	222	**K5OB**: Wayne R. Johnson	16
WM5N: Sheree Horton	119	**NA5D**: Jimmy Vance	11
K5GOL: Richard Goldy	51	**K5IZO**: John A. Chauvin II	11
K5MGJ: Mark Janzer	50	**K5LER**: Lawrence E. Riendeau	10

The next BVARC test session is **Saturday, September 10th at 10:30**.
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. 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 it's 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 grant from a BVARC member

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

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Examination sessions are held each month, usually on the same day as the Saturday BVARC Board meeting (most times, the first Saturday of the month). These 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).

The Feed Point Part 2: Ham Life of Nizar Mullani and Much More

(See August Beacon for Part 1.)

Angels Who Changed My Life– One Fired Me and the Other Hired Me.

I was a high school dropout and did not finish my final year of high school. Instead, I went to work for a Persian civil engineer as a draftsman. I did quite well and progressed to the point where I was doing the preliminary drawings of steel reinforcement in multistory buildings.

All of that changed one morning. The engineer walked into my office, put three books on my drafting table, Math, Physics and Chemistry, and with that, HE FIRED ME! He told me that I was too smart do drafting for the rest of my life and I needed to go back to school to finish my education. He would not listen to any of my pleadings.

So, I went back to school and finished my last year of high school. Feeling confident, I went on to do two years of precollege advanced schooling. I applied for a scholarship to study physics in the USA and was fortunate to be selected for a four-year program at Washington University in Saint Louis. I did two years of postgraduate studies but got bored. I needed a job. I was too qualified to get a clerical job and did not have the MS degree in teaching to be a teacher.

BIOMEDICAL COMPUTER LAB

One day in 1970, a ham friend of mine invited me to go with him to a place called Biomedical Computer Labs (BCL) in the WU Medical School. He showed me around the facility and what I saw simply amazed me. I saw people working on mini computers. These were LINC with 12-bit computers, with 2K of memory and 8 micro-second cycle time. What amazed me is that they were doing all of medical applications like EKG in real time.

I was so blown away with what this lab was doing in 1970 that I told them I wanted to work there. They said “sorry, we do not have an opening.” But I would not take NO for an answer and told them I would work for free. Finally, the director felt sorry for me and hired me as a technician to copy magnetic cards used to program the computers.

Before I knew it, I had learned digital logic with the help of the engineers and graduate students working at the BCL. The director gave me a chance to design an interface to collect data from the brain studies being done in the Radiation Physics lab in Radiology using one of the LINC computers.

POSITRON EMISSION TOMOGRAPHY (PET)

One thing led to another and I found myself designing electronics for a working prototype of Positron Tomography (PET) which became the first PET scanner. I ended up designing and building five PET cameras at Washington University.

Then, I had an offer I could not refuse as an Assistant Professor in the Department of Medicine at University of Texas in Houston. I ended up designing and building a total of five PET scanners before moving to Houston as Director of the U-T Medical School-Houston PET group. In those days, granting a tenured position in a medical school to a person with only a BS degree was unheard of,

We designed a very fast PET camera called TOFPET to capture the whole heart for the detection of early heart disease. This camera was also used in several clinical studies for cancer and drug abuse imaging.

With the help of “angel funding” we started a company called Positron Corporation to build a commercial version of a PET scanner. The company eventually went public after several years and I basically ended up with a master’s thesis on angel funding, venture funding and vulture funding.

THE SWITCH TO OPTICAL IMAGING

After working on PET cameras and radiation for 30 years and doing professor things like teaching and publications, it was time to switch to something that did not require any radiation. A friend of mine introduced me to optical imaging using a device called the Nevoscope. It included a fiber optic ring light that transilluminated a portion of the skin to look for skin cancer. I helped him patent it and sell it. But, the device was too cumbersome to use.

VEINLITE DEVICE FOR FINDING VEINS

The NIH gave me a grant to test the Nevoscope against a device called Dermatoscope for skin cancer detection. During the study, I noticed that I could see deeper veins better with the Nevoscope. So, we introduced a device called Veinlite for visualizing veins. I presented an abstract on a simple device that included a fiber optic ring light for the visualization of varicose veins in 1999. It was a major success and soon the people who were treating varicose veins were using the Veinlite to localize the deeper ‘feeder’ veins that are responsible for the superficial varicose veins that we can see with the naked eye. The Veinlite device has evolved into new LED-based products that are used in different applications. There is a device for use with neonates, one for pediatric patients, one for adults and one for varicose vein treatment. There is even one for helping researchers find the tail vein in mice and rats.

DERMLITE DEVICE FOR DETECTING CANCER

The feedback I got from trying to sell the Nevoscope told me that a typical dermatologist sees about 40 patients a day and has no spare time to use on elaborate medical devices for skin cancer detection. After about three years of getting this kind of response, I decided to strip off everything in the Nevoscope except one. That one item was polarized light with LEDs combined with a loupe magnifier.

So, in the year 2000 I built a prototype pocket device that had a 10X loupe, 8 white LEDs, polarizers and a nine volt battery. I called it DermLite. I showed it to several dermatologists at the Annual Dermatology meeting and all of them said they would buy one if it was available.

So, I formed a three-way partnership with John Bottjer, who had a lot of experience with medical sales and a product designer called Thorsten Trotzenberg. We designed the first commercial model at my little beach house in Surfside Beach and built the first 100 units on my dining room table.

The DermLite device was slow to take off because most doctors are very conservative in accepting new technology. However, DermLite had a major advantage. It fit in a shirt pocket and was not very expensive. It showed the deeper areas of moles and skin cancer without an elaborate device. Soon, it became the go-to device for all dermatologists and the company had over 70% market share.

The DermLite device and the company were recently sold to investors. However, I still have the Veinlite business and still work at 79 years of age. I just wish I had more time to spend on CW contesting.

Nizar Mullani, K0NM

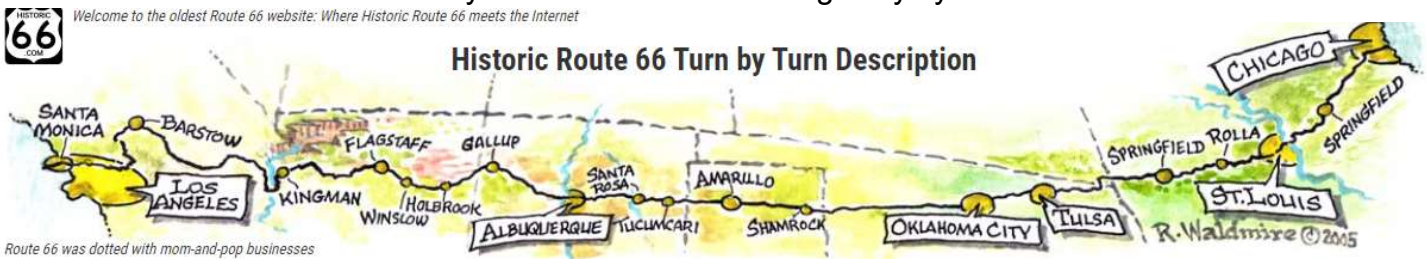
Where in the
World is . . .
Route 66 (On the Air)

I'm betting that by September, most of the Corona Virus will be in our rear-view mirror, and that name will once again call up the image of a pretty popular 807 type beverage that is a beer. If you were born after the age of tube radios, you can check out the comparison to the right.

Figure 1Corona vs. 807

The timing couldn't be better. Just in time for this year's Route 66 On the Air event; scheduled for Sept 12 – 20. It means that designated stations with special call signs (W6A through W6U) will be operating along Historic Route 66 during the nine-day long event.

If you don't get the significance of this commemorative event, you are not a student of history or were born too late to remember the days before he Interstate highway system.



The road begins in Chicago and runs to Santa Monica, California. It is not the oldest or the longest of the transcontinental highways, but it was the first all-weather highway to link the Midwest and Los Angeles.

It was designated US Route 66 in 1926, spanning more than 2400 miles and three time zones. In song and fable, it had other names. Officially designated the *Will Rogers Highway* by the State of Oklahoma and *America's Main Street*. It was also called the *Mother Road* (named that by author John Steinbeck in his book, "The Grapes of Wrath"). The book tells the story of a family of displaced dustbowl immigrants headed to California in search of employment in the 1930's.

The mystique of Route 66 was imbedded in books and films like:

- The Grapes of Wrath
- Easy Rider
- Thelma and Louise
- Bagdad Café
- Cars
- Paris, Texas
- Little Miss sunshine
- Route 66 (TV Series)

Figure 3 Grapes of Wrath

Figure 2 The Bagdad Cafe

Figure 4 Easy Rider

Figure 5 Delgadillo's Snow-Cap Drive In

For more than sixty years the road served America in motion across the land with many unique features. During WW II it was the principal artery for the movement of war supplies. With the opening of the Interstate Highway System, most of the route was replaced. U.S. Route 66 was decommissioned in 1985. Although it was removed from the U.S. Highway system, most of the original route is still drivable. Many of the towns along the original route have become tourist attractions.

If you are lucky enough to be on the Mother Road during that time, you might get an eyeball QSO with one of the stations along the highway. Or maybe stop and visit some of the annual events held at that time like:

The New Mexico State Fair in Albuquerque, Sept 10-20
Oklahoma State Fair in Oklahoma City, Sept 17-20
Tri-State Fair and Rodeo in Amarillo, Sept 18-26
The Train: Steam Sundays in Williams, AZ, Sept 19
World Music Festival in Chicago, Sept 11-27

For more details check out https://www.historic66.com/events/

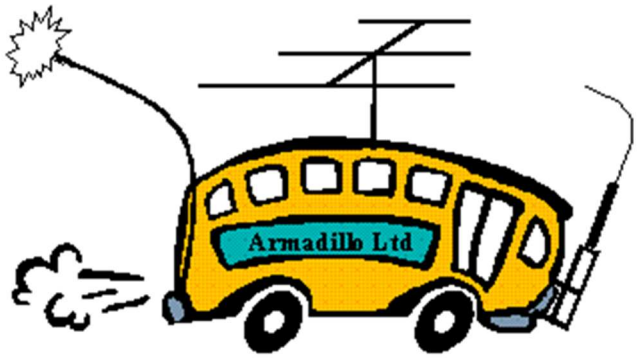
Each year the Citrus Belt Amateur Radio Club sponsors the Route 66 On the Air special event. For nine days in September, twenty-one stations with unique 1 X 1 call signs will be located along the original Route 66 calling CQ. This year is the 21st anniversary of the event. You can request a certificate if you contact at least one of the participating stations, though many hams try to contact all stations. Try and collect all 21 QSL cards this year. It is worth the effort. Get more information from their website at http://w6jbt.org/?page_id=15

Reporting from the Dark Side,
Ron, K5HM

Hamfests
(typically within 200 miles of Houston)

Ham Expo – Fall 2022. The Belton Hamfest
October 1, 2022. 7AM – 1PM.
Bell County Expo Center, 301 W Loop 121
Belton, TX
https://tarc.org/hamexpo

Texas QSO Party



sponsored by Texas DX Society

So you "don't do contests." That's fine. How about trying something just for the fun of it?
What about working some TX county, population 2000, that's somewhere in West God Forsaken Texas?
You can easily work it from home. Many do mobile; others locate at a country site or a state park.

This event is perfect for those who like to activate POTA, IOTA or SOTA sites, those that just want to stay home or those that want to get away and participate. Some people don't even submit their logs: It is strongly encouraged however because it allows the sponsors to cross-check the logs of the "Big Guns" and is simple to do. There are even DX stations who long ago worked all 50 states and are now looking for TX counties.

If you set yourself up in a sparsely populated county, like I do, you will find yourself on the "good end" of "pileups." I usually operate this event SSB but many operate it CW. People working TXQP especially want to work you, so they find you. However, none pass on a Q with anyone, even if in your same county; every Q counts toward their score. A few years back, while at my cabin in East Texas, my daughter was there, and she said that I sounded like an air traffic controller. There, I operate in the "CQ" mode rather than the "Search & Pounce." She would hear me say "Will only the 8s reply" or "will only the 6 to 0s reply" or I might say "will the 7 stand by" as I would work the other ham.

The event takes place on September 17 & 18 from 9AM CDT to 9PM on Saturday, and 9AM to 3PM Sunday. That gives everyone the opportunity to get a good night's sleep before resuming on Sunday. The "BIG" contests usually operate continuously from 0000Z Saturday to 2359Z Sunday (48 hours). Operate TXQP maybe only for a total of 2 hours, spread out over 5 hours or you can operate all 18 hours. That doesn't matter; what matters is that you have fun.

Go to www.txqp.net for details, suggested frequencies and other tips. The exchange is RS(T) and the county that you are in. Traditionally the RS(T) is always 59 for SSB and 599 for CW. Go to the website to find out your county 4 letter abbreviation – HARR for Harris, FBEN for Ft. Bend, etc. Listen for me, K5IZO in San Augustine County (SAUG). As I am in "pileup central," I usually work all 18 hours.

Have fun!
K5IZO

Editor's Note: The full list of officers, eating places, nets and advertising info is published when space allows. Either look at a recent past issue of the BEACON on our website or look elsewhere on the website for more info.

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 temporarily virtual via ZOOM on the 2nd Thursday of each month at 7:00 p.m. If you have signed up for the reflector, you will receive notice and the attendance password, etc. It will also be on the website (above) a few days beforehand.

BVARC amateur radio testing has resumed. It takes place typically on the Saturday before the 2nd Thursday of each month at 10:30 AM. Location: Bayland Park Community Center, 6400 Bissonnet, Houston, 77074. BEFORE GOING, because of COVID and scheduling conflicts, please check the BVARC website for any changes. Masks and social distancing are required.

A Public Service Net is held each Monday at 8 p.m. on the 146.94 (minus offset, PL 167.9 tone) repeater.

During COVID-19 a "Stir Crazy Net" is also held weekdays at 12 Noon on the same frequency as above.

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

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

Other contacts include:
President:, Mike Hardwick, N5VCX, n5vcx@att.net
Newsletter Editor, John Chauvin, K5IZO, k5izo@yahoo.com
Newsletter Printing, Assembly and Mailing: Daphne Rawlinson, K5VQY, daphne_rawlinson@hotmail.com.
Jeff Greer, W5JEF, greerjw@hotmail.com, Mark Brantana, N5PRD, N5PRD@yaho.com

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ADDRESS SERVICE REQUESTED

FIRST CLASS POSTAGE

September 8, 2022 – General Membership Meeting (see notice herein)
September 12-20, 2022 Route 66 On The Air (see article herein)
September 17 & 18, 2022 Texas QSO Party (see article herein)

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