



BVARC BEACON



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

APRIL 2020

VOLUME 44 ISSUE 4

The Prez Says

Let me start with the main topic that is on everyone's mind, the COVID-19 virus. There has been a lot of changes for all of us since the last Prez Says because of the COVID-19 virus. In some ways, the US has been turned on its side for our normal day-to-day lives. The Covid-19 virus, which is now a pandemic, is here for several months and it will not be affected by how people believe the virus started or any reason for the cause. We now must work with the hand that we have been dealt with that is changing our lives.

Due to COVID-19, upcoming club functions are going to be greatly affected. Since facilities we host our events in are closed, the BVARC general meeting along and BOD meeting are cancelled for April and May. The BOD meetings will be held via conference call. As for general meetings, hopefully we'll have streaming meetings soon so check BVARC web site for updates.

On March 21st Board of Directors meeting, many ideas were suggested for club functions. They ranged from streaming broadcasts on Facebook/YouTube (as mentioned above) to multiple NETS spread over the week. One suggestion on a streaming video is to have one like "Welcome to My Ham Shack". If you are interested in doing this, contact Jon Noxon has volunteered to help.

Rick Hiller, W5RH, started a Saturday morning HF net in lieu of the Saturday morning breakfast. After the first one, there were a few glitches but otherwise went well. I heard a few comments to make it better. They are:

1. The NET should be on 3907 since 3910 is occupied.
2. Make "talk times" shorter, maybe a minute. This will allow more to people to talk, just like breakfast at IHOP.
3. There needs to be a way to coordinate operators before the NET starts. A web site where people could sign-up/register before check-in. This would let people know who is waiting in the wings and ready to get on the air. You can still check-in randomly, but having the web site will help on see who is there.
4. This should be a No NET Control Net. When you speak, you can do the traditional "This is . . . N5VCX, and continue.

These are just some suggestions I am making from the comments I heard from several people. I hope to be on HF in a week or two so I can join in on the Breakfast NET and add my comments "in person".

As for the rest of the time, since we, as hams, have the technology to communicate, there are several other NETs we could start up. When I worked in Dallas, the Dallas Amateur Radio Club had at least one NET per night on their 146.88

repeater. The repeater was constantly busy and you could always hear something interesting. Taking their idea, I have come up with ideas on different NETS for the club.

| | | | | |
|------------------|-------------|--------------------|----------------|---|
| Sunday | 7 pm | 146.94 | VHF Net | Info Net – What did I do this weekend to survive |
| | 8 pm | 3910 +/- 3 | HF Net | For the people that cannot make Wednesday's HF net |
| Monday | 8 pm | 146.94 | VHF Net | Regular Public Service Net |
| Tuesday | 8 pm | 28.488 | HF Net | 10-10 Net Encourages 10M use & do a roundtable. |
| Tuesday | 7 pm | 146.94 | VHF Net | Tech Help Net – I broke my radio and I cannot fix it |
| Wednesday | 7 pm | 3910 +/- 3 | HF Net | Rag chew Net |
| | 8 pm | 146.94 | VHF Net | Copy of 75m net ops that don't have privileges/ equip |
| Thursday | 7 pm | 146.94 | VHF Net | Trivia – All kinds – Radio, Cars, Guns – hardware related |
| Friday | 7 pm | 146.94 | VHF Net | Movie/TV Net – What I am watching this weekend |
| Saturday | 7 am | 3907 +0/- 3 | HF Net | Breakfast Net |
| | 2 pm | 7285 or 14.285 | HF Net | QRP |

The various NETS are suggestions. We already have 3 of them and I think a couple of more would help keep people connected and the club communications going. And finally, we cannot let Dallas do something better than Houston so step-up and start up a NET for BVARC.

Hopefully we will be able to return to some type of normalcy in a few months. If not, the “new normal” will affect Museum Ships Weekend and possible Field Day. I know Mark Janzer, N5MGJ, is planning a work party for Museum Ships sometime in late April or early May. This will depend on status of social distancing and the regulations by the local governments. Keep your fingers crossed that things will return to some type of normalcy by then.

To keep the club going, we need to communicate with each other, both individually and collectively. I will make sure that I send out updates via e-mail and the web site as often as necessary. I do not want to overload anyone, but I also do not want to leave anything behind. And speaking of behinds, do not hoard toilet paper. That is what old logbooks are for.

On a more positive note, the 2020 Greater Houston HamFest is over. The turnout was higher than last year making the event phenomenal. With nearly 1000 attendees, the event was busy throughout the day all the way to the grand prize drawings. The addition of the Innovation Spark Group helped bring in exactly what amateur radio is needing – young people. The groups from Innovative Spark are interested in working with us again next year so full steam ahead.

This year there was a lot of hard work done preceding the Hamfest. Arranging speakers to coordinating raffle prizes to handling table sales, the GHHF committee worked hard to make the event successful. This year was special since we had THREE balloon launches by the South Texas Balloon Launch Team. Hats off to the South Texas BLT and the GHHF committee!

Besides our ARRL West Gulf Division Director, John Stratton, N5AUS, we had Forrest Mims as our featured speaker. If you are not familiar with Forrest Mims, he was the author of the Radio Shack Engineer's Mini Notebook series as well as several other technical publications. If you missed Forrest, you missed out. Hopefully he will be back in the future.

The grand prize, and Icom IC-7300, went to Kristy Hartnett. Even though she is not a ham, she was ready to get her license and start using the radio, if her husband will let her (I did not want to get between this discussion but I think it will be fairly heated on whose radio it is!).

There were many other people that contributed to the hamfest. Listing them all would take up good deal of space. I just want to say thanks to the people that volunteered their time to help and make the event a wonderful success.



73,
N5VCX



Report on the March General Membership Meeting

Jeff Greer (W5JEF) gave a spirited presentation on the Raspberry Pi. He later provided a resource for the Ham Radio software that can be pre-installed to a boot micro-card and from where bits of the presentation came from. Check out this link:

<https://forums.qrz.com/index.php?threads/w3djs-raspberry-pi-ham-radio-image-v2-0-released.680336/>



Thank you for a Great 2020 HamFest
The HamFest committee appreciates your support of the HamFest and the amateur radio hobby.

| | | | |
|----------------------|------------------------------------|-----------------|-------|
| Raffle Prize Winners | | | |
| DMR Prize | AnyTone AT-D678UV III Pro | Gene Keller | NSROE |
| Convention Prize | Rig Expert AA-600 Antenna Analyzer | Matt Wolf | |
| Grand Prize | ICOM IC-7300 | Kristy Hartnett | |



Mark your calendar for the 2021 Greater Houston HamFest

| | |
|---------------------------|--|
| Friday, March 5th, 2021 | Set-up, Workshops, Tailgating, Spaghetti dinner |
| Saturday, March 6th, 2021 | Vendor Sales, Flea Market, Testing, Workshops, Presentations, Set-up, Workshops, Tailgating, Rollout Lunches, Fox Hunt, Tours for the YL/XVL, Tailgating |



Our 20th Year!



Hamfests

(typically within 200 miles of Houston)

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

NOTE: Due to the Coronavirus, most hamfests across the nation for the next couple months are cancelled. Those listed below with details have not officially cancelled as this issue of The BEACON goes to press. Check with their websites before planning on any participation.

May-2020 - Dayton Hamvention
Cancelled

06/12-13/2020 - HAM-COM
Plano TX Convention Center.
<https://sites.google.com/hamcom.org/ham-com>

07/11/2020 - Swapmeet
Location: Texas City, TX
Type: ARRL Hamfest
Sponsor: Tidelands Amateur Radio Society
Website: <http://www.tidelands.org>

March 2020 VE - FCC TESTING SESSION RESULTS

For the Hamfest on March 7th we had two test sessions. The first was from 8:30 to 12:30, The second was for the Ham Class from 4:30 to 6:00:

For the first session we had 23 candidates served, 34 tests given, 8 new Techs, 5 upgraded to General and 3 upgraded to Extra. One fellow entered without a license and passed both the Tech and General - and had only studied for a week - he said he's an RF professional.

New Licensees:

Pinkston B. (General)
Burke B. (Technician)
Cameron C. (Technician)
Lubojacky S. (Technician)
Crenshaw K. (Technician)
Barbour R. (Technician)
Van Demark A. (Technician)
Roddy D. (Technician)
Huff M. (Technician)

Upgrades

KE5VAJ (General)
KI5IGA (General)
KF5CZN (General)
KI5FOX (General)
KI5FBF (General)
KI5GAP (Extra)
KI6VBZ (Extra)
N5IMC (Extra)

A big thank you to all that helped with the testing for the Hamfest. These candidates could not have been served, if but for their efforts as volunteers. VEs in attendance – AC5TC, NM3F, K5LER, K5LJ, K5GOL, KI5CG, W6KAL, WA5UBP, KA5DXA, N5KY, W5GX and WW5OO

For the 2nd test session (the Tech Ham Class) 4:30-6:00ish
13 candidates served, 16 tests given, 10 new Techs. 2 had perfect scores.

New Licensees:

Endsley K. (Technician)
Bennett A. (Technician)
Smith J. (Technician)
Bonica S. (Technician)
Grinstein M. (Technician)

Williams J. (Technician)
Mills B. (Technician)
Buckholz J. (Technician)
DeLapp (Technician)
Barrera J. (Technician)

VEs in attendance – KF5LMJ, NM3F, KF5MVP and N5VEV

Congratulations to all!

Examination sessions are held each month, usually on the same day as the Saturday BVARC Board meeting. These sessions are normally at the Bayland Park Community Center, 6400 Bissonnet St., Houston TX 77074. **The Community Center is currently closed (as of the newsletter print date).**

Details for candidates are found at www.bvarc.org/home/amateur-license/

If you'd like to volunteer as a VE, details can be found here: <http://www.arrl.org/become-an-arrl-ve>

Call Mark Janzer, K5MGJ at (832) 875-0526 or eMail: (k5mgj@yahoo.com) to pre-register for testing.

The Radio Hotel – Amazing Things We Take for Granted by Rick W5RH

There was a time in radio's history when today's common radio knowledge was a ground breaking discovery. I recently finished reading a few books about some of the radio pioneers from the late 19th and early 20th centuries. Heinrich Hertz, H.P. Maxim, A.C. Collins and H.H. Beverage; just 4, so far, in my post-retirement quest to read more.

Can you imagine having a "unit of measure" named after you? **Heinrich Hertz** of Bonn, Germany certainly made the grade and rightly so. He discovered the basics of electromagnetism. Today we say KiloHertz, MegaHertz and GigaHertz, but it used to be Kilo "cycles", etc. until 1960. This physicist was using coils of wire and Leyden jars in the 1860's to produce experiments which led to the discovery of and mathematical derivation of electromagnetic radiation, also known to us as RF. Flat out amazing.

Hiram Percy Maxim is recognized as the Father of Ham Radio. He put it all together, with help, from a few other radio enthusiasts. He talked the pointed heads in Washington into allowing us to have our bands and they theirs. He founded the ARRL and became its' first president along with being the first president of the IARU. At that time, message "relay" was the way things worked. He was 1AW and part of the relay network. He was a Ham, yes, but also an automobile inventor, a gun silencer inventor and manufacturer, a movie script writer, author and many other things. His ham station call, W1AW, is now the call sign for the ARRL's flagship station. Also, flat out amazing.

Harold H. Beverage was a young lad living on an island off the coast of Maine. Fascinated with radio, he chased an electronic education and a radio research job with RCA. He designed and installed many an HF commercial station worldwide. He also installed radio telephone stations on presidential yachts and steam liners. These commercial stations, used for CW based message traffic, needed interference free and noise free reception. Beverage's work in this area of radio diversity reception earned him a place in the illustrious list of antenna types. His 1920's invention, the Wave Antenna, was aptly given the moniker the "Beverage Antenna" and is still in use by hams and long distance HF commercial stations today. Wish I had an antenna named after me because HHB's invention is amazing.

Arthur C. Collins, head of Collins Radio, was the first major implementer of SSB – Single Side Band, along with many other radio inventions (i.e. auto-tune transceivers and high Q mechanical filters). He started building transmitters for other hams when he was a teenager and continued into business in AM, FM and SSB radio, avionics and computers – right alongside of IBM and Burroughs. Then finally, after being bought out by North American Rockwell, Collins faded away. But Collins ham gear is still sought after by many, (rock guitarist Joe Walsh, included). Collins is one of those names in radio that everyone knows. Amazing accomplishments for a boy from Oklahoma and Iowa.

EMR/RF, ARRL, Beverage Antennas and Single Side band are concepts and inventions envisioned and implemented some time ago. As Hams, we use these things and many others every day and, fair enough, take them for granted. However, next time you use your "Eleyecomplexwood" transceiver, please give a thought to the technology and its' historical path beyond the front panel.

Enjoy your hobby. 73...Rick – W5RH

Where in the World is . . .
Sri Lanka (4S)
CQ Zone 22 IT Zone 41
IOTA AS-003

Sri Lanka, the name connotes a tropical isle with warm breezes and a life of ease.

Officially, the Democratic Socialist Republic of Sri Lanka. The island nation is located off the Southeastern tip of India in between the Bay of Bengal and the Arabian Sea. During WW II it was part of the British Empire but achieved independence in 1946. Formerly, known as Ceylon it changed the name in 1972 to reflect the dominance of the ethnic Sinhalese population.



Its strategic location between East and West made Ceylon (Sri Lanka) a busy trading place along the Maritime Silk Road that flourished between Europe, India and Asia during the 2nd Century BCE and the 15th Century CE. After the death of Mao Zedong, the Chinese government made itself an important partner in East-West trade. It obtained long term leases over port facilities along the route including in Sri Lanka. But – I digress.

The country's largest city and its commercial capital is Colombo; a name I can at least pronounce, while the legislative seat of government is Sri Jayawardenepura Kotte, which I cannot.



Figure 1 Colombo

The country's trade in luxury goods and spices attracted traders of many nations to the island, creating the diverse population in Sri Lanka there is now. The Portuguese, whose arrival in Sri Lanka was largely accidental, would intrude into the country's internal affairs by seeking to establish control over the maritime regions of the island in order to control its lucrative external trade.

The Portuguese possessions would later be taken over by the Dutch, and the Dutch by the British who would later extend their control over the whole island, colonizing it from 1815 to 1948. Resistance to the British was immediate. A nationalist political movement arose in the country in the early 20th century for political independence, which was granted in 1948; the country became a republic and adopted its current name in 1972. Sri Lanka's recent history has been marred by a 26-year civil war, which ended decisively when the Sri Lanka Armed Forces defeated the Liberation Tigers of Tamil Eelam in 2009.

In addition to the trade benefits between east and west, Sri Lanka is the world's number two exporter of tea. Ceylon tea has been recognized as the cleanest tea in the world regarding pesticide residue.



Figure 2 Ceylon Tea

Sri Lanka is one of only two South Asian countries rated "high" on the Human Development Index (HDI), with its HDI rating and per capita income the highest among South Asian nations. The Sri Lankan constitution accords Buddhism the "foremost place", although it does not identify it as a state religion. Buddhism is given special privileges in the Sri Lankan constitution.

Sri Lanka is the 57th most populated nation in the world with roughly 21,670,000 people. The densest areas are in and around the capital. Sinhalese constitute the largest ethnic group in the country, with 75% of the total population. Sri Lankan Tamils are the second major ethnic group in the island, with a percentage of 11%.

According to QRZ, there are 320 licensed hams in the country. Sri Lanka stands at. number 183 on Club Log's Most wanted DXCC most Wanted List,

There are several radio clubs sponsored by universities, along with The Amateur Radio Society of Sri Lanka (RSSL). which is the official representative to the IARU.

Reporting from the Dark Side,

Ron, K5HM



Cutting Through the Static – A Column for Newbies

JP Pritchard, K5JPP

RFI in the Ham Shack

If you're new to ham radio, you may not have had much to do with the initials RFI. But once you start operating on the air, you're going to need to know a thing or two about it. Not that there isn't a lot of information. In fact, the ARRL sells a great publication on the topic: ["The ARRL RFI Book."](#)

RFI refers to Radio Frequency Interference and sooner or later, you're going to be looking for more information on RFI, also known as EMI (electromagnetic interference).

I first encountered the problem, though I didn't know what it was called," shortly after I attained my Technician Class license. I was talking on a Baofeng HT and my wife noticed that every time I keyed the radio, she'd hear a hum in her computer speakers.

A more experienced ham suggested I obtain some ferrites, otherwise known as ferrite beads or ferrite cores. These are clamp on devices that contain a special ceramic mix of iron particles and other materials, formulated to trap (or choke off) unwanted RFI.



I found a large selection of choices on ["Amazon"](#) and quickly solved the problem.

To understand what's going on, we begin with the idea that every piece of wire in your home or your shack aspires to be an antenna. So all those wires – power cords, speaker wires, USB cables, Cat-5 or Cat-6 Ethernet cables and yes, the coax that goes from your transceiver to your antenna, they all pick up random

signals from the space around them.

How do you know they're there? It might show up as hum in a speaker, a mouse or keyboard that does weird things while you're using them or a computer that locks up. This unwanted noise or interference signal can usually be eliminated by using induction established by the proper use of ferrites.

How do these simple, clamp on devices block unwanted RFI or EMI? Iron powder is combined with certain chemicals at a particular ratio, called "the mix," which is stirred into a ceramic material and baked into particular shape. In this case, it's a form or shape that can be contained in a clamp arrangement that can be closed over a wire or cable. The unwanted signal is caught by the wire interacting with the ferrite. Noise or interference gone, (hopefully).

This unwanted noise is often a type of “common mode” signal, and there’s a whole set of mathematics that describe what is happening.



But in some cases, the ferrite bead isn’t enough. That’s when we call on the ferrite bead’s big and more powerful brother, the donut. No, No, that’s not what it’s called, though it does look like a donut. We refer to these RFI solutions as toroids (because of their toroidal shape).

Toroids come in many sizes, from tiny donuts used in surface mount constructions to the bigger guys used in more serious RF settings, even high-power broadcast settings.

In all cases, these iron-activated forms are used in combination with a wire or cable to set up an inductance, which raises the impedance of the circuit it exists in. That impedance serves to block the unwanted common mode current, choking it off. Thus, this use of a toroid is called a choke.



You know from your license studies that an inductor is usually a coil. Current passing through a wire or cable coiled on the ferrite material of a toroid sets up a magnetic field and that’s what raises the impedance. This process is reflected in mathematical functions that determine the level of impedance.

Designing a choke to stop RFI is easily accomplished without doing any math. As a rule, you wind your wire or cable through the toroid or ferrite bead as many times as the diameter of the wire or any attached connector allows.

I delved into RFI issues as I discovered that running high power (and sometimes even low power) on 40 meters locked up my ham shack computers. What confounded me at first was the fact the SWR on my antenna on 40 meters was 1.08, meaning very little RF was coming into the shack on the feed line. So, what then?

My SteppIR Small Vertical is on my roof with radials running out from its base across the roof. It became obvious that one or more of those radials was apparently blasting a strong signal through the roof into the shack. A borrowed field strength meter seemed to confirm that.

Problem defined, solution found. I acquired several 240-31 toroids at the Greater Houston Ham Fest and began winding them up with USB cables and power cords at their entry points into the computers.

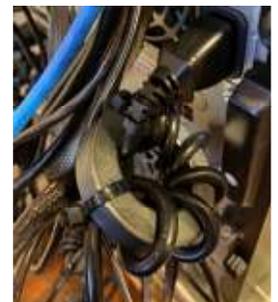


In toroid lexicon, the first number, 240, indicates the diameter, 2.4 inches, while 31 identifies the chemical mix of the ceramic core. The two most popular mixes for ham radio are apparently 31 and 43, where 31 works best for the lower frequencies, 40 meters and below, and 43 is best for those above that.

I installed the toroids as close to the computer ports as possible and did the same thing with the power plugs.

Problem solved. I can now operate FT8 and SSB at 500 watts or less without my two ham shack computers going into paralysis.

One other note. The solutions I’ve described here are specific to my circumstances, while everyone’s RFI problem is different to one degree or another. Ask questions, check the many references, from YouTube videos to ARRL publications, and be creative.



Persistence pays off. And once again, I offer up my thanks to my overworked Elmers, W5RH Rick, W5VOM Bill and WW5PA Paul. And this plea to other experienced hams: please coach a newbie. It will help save our wonderful hobby.

JP, 73, K5JPP



MINUTES
Board of Directors Meeting
Brazos Valley Amateur Radio Club

March 21, 2019 9:00 AM

Via Teleconference

Board Members Present:

Mike Hardwick N5VCX (President)*
Jon Noxon KF5TFJ (Rec. Secretary)
Rick Hiller W5RH (At large director)

Jeff Greer W5JEF (Cor. Secretary)
JP Prichard K5JPP (incoming Director
2Yr)
Scott Medbury KD5FBA (Director 2 yr)

David Ely N5EKW (Treasuer incoming)
Randy Pollard Visitor
Mikel Monsour Visitor

Recorded by Jon Noxon, KF5TFJ Recording Secretary

- 1) Call to Order: The President called the meeting to order at 9:07
- 2) Establishment of Quorum: A business quorum was established. (Five of eight officers and board members present.
- 3) Approval of Agenda: The Agenda was approved
- 4) Club President's Opening Statement: The President thanked those present for attending the meeting and opened dialog regarding path forward for club activities during the current global pandemic crisis.
- 5) Emergency Business: In light of global COVID19 pandemic, we need to seek meeting methods to eliminate person to person contact. Suggestions include live streams such as Facebook and YouTube. Noxon volunteered to produce videos should it be needed.
- 6) Approval of Treasurer's Report: No report from treasurer.
- 7) Corresponding Secretary: President gave the CS report.
- 8) Old Business:

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

Status of donations to Stewart (A/C and electrical improvements). Emphasis needed to get Cavalla antennas working. Mobilization party to be determined.

Topics suggested for future meetings:

Antenna modeling.

DMR "Hot spots"

"Marty Blaise" list of potential topics (to be reviewed)

Other speakers via SKYPE or other social media. (TBD)

- 9) New Business:

Rick: contact information on roster shuld be optional. A line should be added to application form for individuals to have contact information not posted other than name and call sign.

- 10) Cost Saving Measures:

Status Continue looking into this on an on-going item.; Storage Locker is the one remaining major expenses.

- 11) Next BOD meeting date: April 4, 2020

- 12) Comments:

- 13) Adjournment: Meeting adjourned at 9.49 am

GHHF 2020 Aimed High at the Sky

Andy MacAllister W5ACM

The South Texas Balloon Launch Team (BLT) had quite a challenging array of efforts, all to be accomplished between 7 AM and noon at the Greater Houston Hamfest this year. Many BLT members showed up with their parts ready to go. There were three balloons to fly for BLT's 56, 57 and 58. Each payload was unique and some items were quite new. Technologies represented included ultra-small and ultra-light-weight Automatic Packet Reporting System (APRS) units from Walter K5WH, one carrying an integrated 20-Meter Weak Signal Propagation Reporter (WSPR) transmitter, 910 MHz Analog Amateur Television, a 5.8 GHz video link from the receive tent outside, a HF/VHF station set up by Rudy W5HRH for WSPR, FT-8 and CW, and a 50 MHz temperature probe with data sent via CW.

Setup began at 7 AM. The three tables in the main hall for BLT use were near rollup doors to allow easy access to antennas and video link gear. Various computers were present to monitor the WSPRnet via <http://wsprnet.org>, APRS via <https://aprs.fi>, and the live balloon video via the microwave link from the BLT-58 Video Tent. Previous payloads from the very early days of the BLT in 1990 were on display with some of the newer payloads thanks to Mike WA5TWT. An area was set aside for balloon prep work. The outside tent was handled by Tom K5SAF and Kirk KK2Z, and included two monitors to watch the video directly from BLT-58. This allowed Yagi aiming for the ATV. They also had the microwave video relay back to the BLT tables.

BLT participation began with a presentation by Andy W5ACM at 8 AM. Items covered in the talk included the history of the group with photos dating back to BLT-1 and an excellent short video from BLT-53 last September. Complete descriptions of the payloads of the three GHHF flights were shown. Immediately following the last slide, the group went outside to launch BLT-57. It was decided to fly BLT-57 first since BLT-57 had a rather fragile 20-Meter vertical antenna for WSPR. Winds are usually slower early in the day, and we wanted an easy launch.

BLT-57 was a LiteAPRS-W from QRP Labs running 0.5 Watts on 144.390 MHz, 10 mW on the standard 20-Meter WSPR frequency, and weighed 9 grams. It used a 36-inch Mylar party balloon and identified as BLT-57 with the call sign K5WH-15. Power was directly from solar panels with multi-Farad ultra capacitors. It was last heard near 23,000 feet over Louisiana as darkness fell and the transmitters went silent.



K5WH and BLT-57.



WA5TWT, W5ACM and the BLT-58 balloon.

BLT-58 was our showcase flight for the 2020 GHHF. Tom K5SAF came up with a camera and a FM TV transmitter on 910 MHz running 700 mW. Power was from eight Energizer Ultimate Lithium AA cells. They are rated to -40 degrees F. The transmit antenna was a horizontally-polarized, omni-directional "little wheel". Ed N5EM did extensive antenna tests for both uplink and downlink antenna options. We had remarkably good TV for most of the flight. It was estimated that we got to over 100,000 feet before the small latex balloon finally popped. Thanks to the inclusion of a small CW "beeper" on 50 MHz CW sending temperature data, we could correlate the temperature data to altitude via charts. John AB5SS got the beeper built just days before launch.



BLT-58 Temperature Probe with 6-M CW.



BLT-58 910 MHz Video Payload.

Prep work immediately began on BLT-56, a PicoAprs-Lite developed by DB1NTO. This payload was slightly lighter than BLT-57 at just over 7 grams and only a 2-Meter antenna. It also used solar power with multi-Farad ultra capacitors. In addition to Global Positioning System (GPS) location information on 144.390 MHz FM, running 0.5 W output, and a 36-inch Mylar party balloon, it also had pressure and temperature data. Launch was just before noon. It identified as BLT-56 with the call sign K5WH-13. It was last heard on the Sunday after the Hamfest near 25,000 feet, just west of Naples, Florida.



The BLT-58 Tent with the KK2Z Rotator.

All photos by Berris KF5HSH



Museum Ships – Status and Upcoming Work Party

This years Museum Ships Weekend Event (MSWE) is scheduled to be held the weekend of June 6th and June 7th, 2020. Currently the ships and Seawolf park are closed to the public, due to COVID-19. Despite the park not open to the public, I'm presently trying to arrange for a work party primarily to delve into the antennas on the Cavalla submarine. We'd like to get the Cavalla radio room activated, as another station, for the event.

We presently have a space allocated for two stations in the after-berth of the Stewart and a third in the Stewart radio room. The Stewart radio room is generally manned in the evenings, during the event, as the A/C cannot keep up with the heat of the day.

Tentatively, we'll shoot for a work party towards the latter part of April, or early May. We might rent a lift, so as to be able to access the conning tower, for the antenna work. Stay tuned for updates on the email reflector. Feel free to contact me, Mark Janzer, K5MGJ at k5mgj@yahoo.com to volunteer, suggest a date for the Work Party, and ask questions. All BVARC members are welcome to participate.



Webcam snapshot of the Cavalla conning tower, showing the location and condition of the two vertical antennas and the wire antenna, lower left.

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 Imperial Park Sugarland Recreation Center at 234 Matlage Way, Sugar Land TX, 77478. Check the above website for any possible changes.

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, please check the BVARC website for any changes.

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, see the BVARC website: www.bvarc.org

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

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

FIRST CLASS POSTAGE

Due to the CoronaVirus, there are no meetings nor amateur radio license testing sessions scheduled for April. Please periodically check the website for any news, possible teleconferences, etc.



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