BVARC GENERAL MEMBERSHIP MEETING,
7:30 PM, Thursday March 10
421 Eldridge Rd, Sugar Land, 77478, Sugar Land Masonic Lodge

This is the meeting all our members love: Homebrew Night. Sorry, it is not about beer, but the projects big or small that YOU will present to the club. Coordinator is Jon, KF5TFJ, so if you have something to show, contact him by phone (281-343-9965) or email so appropriate arrangement can be made. This time there is a prize for the best project as determined by the meeting attendees. The prize is absolutely unique in the annals of radio, and trumps high power amplifiers and really tall antennas. Don’t miss it!

February Meeting - Emergency Communications: the Go Kit

Kerry Mallory, AE5JY, talked about Go Kits for emergency communications, and presented not just one but four Go Kits for various scenarios. So now we know how to pack our grandfather’s trunk! Thanks, Kerry.

NEWSFLASH: Congressman Pete Olson to speak at the Hamfest

US Representative Pete Olson will speak at the Hamfest. He is the Congressman for District 22, which covers Sugar Land, Rosenberg, most of northern Ft. Bend County and east through Pearland. Expect to receive some updates on the Radio Amateur Parity Act direct from Capital Hill.
The Prez Says

Due to various factors, Da Prez was not able to submit an article this month.

Reminders include volunteering for the Hamfest, board & Hamfest meeting on Saturday, March 5, the General Membership meeting Homebrew Night on March 10.

Editor’s Note:

Because many of the regular article authors are tied up with the last minute activities of making the Hamfest happen, and some for personal reasons, some have been unable to submit their usual articles this month. Look for them to reappear in next month’s issue.

Tnx, John, K5IZO, Editor

Results of the February 9th
BVARC Amateur License Examination Session by:
John Moore, KK5NU

B-VARC sponsored and administered the ARRL’s Amateur Radio Examination session that was held on Tuesday, February 9, 2016 at HCC's Scarcella Science & Technology Building here in Stafford, TX.

MEMBERS OF THE VE TEAM:

Richard Goldy, K5GOL  Larry Jacobson, K5LJ  John Moore, KK5NU
George Ontko, KM5VP  Randy Pugh, AA5OA

Five examination elements were administered during the evening to five (5) applicants. Two new Technician class licenses were attained, along with one upgrade to General class and one upgrade to Amateur Extra class, with the total number of elements passed being 4. The overall "pass rate" for the evening was 80%.

Congratulations to the following who attained a license and/or passed an exam:

Robert M. Heisler - {KG5LRQ} - Technician
Jeffery P. MacMillian - {KG5LRP} - Technician
Ronald L. Matusek - WA6TQH - Amateur Extra
Don J. Wells - KG5DEC - General

Many thanks to all the Team Members and Assistants who volunteer their valuable time and effort each month. All of us at B-VARC again thank everyone at HCC Scarcella Science & Technology Building for making these excellent classroom facilities available to us for our exams each month.

..... 73 ....
Greater Houston Hamfest – Volunteering

*Your time and service are requested*

Attending any of the past 14 Greater Houston Hamfest / BVARC Mix and Match gaggles was fun. That is the first order of agenda for the Hamfest….have fun. In fact, we would like all 1000+ attending Hams to have fun. To do that, the core group of folks that put the GHH together have laid out a phenomenal schedule of events and support activities so that any attendee can certainly find a few things that make it worth their while to come out and have a good time.

However, having 1000+ guests attend your party requires some help and that is where YOU, a BVARC member, come into play. We need you to come out and volunteer your time on March 18 and 19 to help run the operational aspect of the GHH 2016. You can volunteer as little as 2 hours or as much as the full day. The choice is yours, but, (and here is the catch)……for those 2 hours you get **free entry** into the Hamfest and all of the activities. A $10 value. I realize that is below the current minimum wage level, but your time is also a donation to the BVARC club. Give a little back to the club that provides you Ham Radio camaraderie.

Come out, have fun, help set up, help tear down, volunteer to watch the doors, assist in the control of traffic, monitor the speaker rooms, or perform one of the many other tasks that need to be done on those two days in March.

Contact me – Rick W5RH  Head Volunteer Wrangler

rhiller@sdicgm.com  or  832-474-3713  to get on the list.

Brazos Valley Amateur Radio Club

**Board of Directors Meeting Dates and Times for 2016**

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<th>Date</th>
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<th>Event</th>
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<tr>
<td>March 5th, 2016</td>
<td>9 to 10:30 am</td>
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<td>9 to 10:30 am</td>
<td>BOD meeting</td>
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</tr>
<tr>
<td>December 3rd, 2016</td>
<td>9 to 10:30 am</td>
<td>BOD meeting</td>
<td>Bayland Park</td>
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**BVARC Historical Vignettes –**

See Editor’s Note on Page 2.
This series will resume next month.
15th Annual
GREATER HOUSTON HAMFEST
Brazos Valley Amateur Radio Club
ARRL South Texas Section Convention
Now! Two Days of Hamfest
Friday, March 18, 2016 – 1 pm – 5 pm
Saturday, March 19, 2016 - 8 am – 3:30 pm
Tailgate Sales start at 7 AM

Fort Bend County Fairgrounds 4310 TX-36 S Rosenberg, TX 77471-9108
Visit http://www.houstonhamfest.org for each day’s schedule
Great Tech Sessions all day Saturday

Featured Speaker: Riley Hollingsworth, K4ZDH, Former FCC Top Cop
for Spectrum Enforcement and speaker at many Hamfests
Keynote Speaker: Carl Luetzelschwab, K9LA, Former Editor National Contest
Journal (NCJ) and recognized authority on propagation, DX’ing and Contesting

CW Pile Up Contest – How well can you copy code in a pileup?
- Ham Radio Balloon Launch – To the Edge of Space!
- Remote HF Operation Demo
- More Sessions to be announced.
- Door Prizes Galore! Door Prize ticket included with your entry ticket purchase
Special Promotion! – Present this Flyer and get 1 extra Door Prize Ticket Free!

Big Prize Raffle Drawing: Tickets $1 each. Purchased on site.

GRAND PRIZE
Kenwood TS-590SG HF Transceiver
Kenwood TM-D710GA 2M/444 w/APRS
Saturday Table Sales -- Non Commercial Exhibitors - They're going fast!
Table Sales available On-Line: All Tables - $15
5 or more tables receive 2 free admissions. Electricity available to pre-registrants ($5 total).
On-site registration – electricity as available. Set-up available: Friday 3-7 PM, Saturday 6-8 AM

http://www.houstonhamfest.org

Admissions: Advanced - Pre-paid Tickets until March 14, 2016 - $8 -- includes 2 Door Prize drawing tickets.
At-Door: $10 – Includes 1 Door Prize drawing ticket. Tailgate: $5 per vehicle.
Scouts in uniform & Children under 14 – Free Entry!
Minutes of the February 6th 2016 Board of Directors meeting of the Brazos Valley Amateur Radio Club

Mike Hardwick called the monthly Board of Directors meeting for the Brazos Valley Amateur Radio Club to at 9:13am on February 6th, 2016, at Bayland Park Community Center, 6400 Bissonnet, Houston 77074. Attending were:

Mike Hardwick N5VCX (President.), Jon Noxon KF5TFJ (Vice President), Donovan Balli KD5BDZ (Treas.), Michael Monsour AC0TX (Rec.Sec./Quart.), Scott Medbury KD5FBA (2yr At-Large Dir), Jerry Muller K9GEM (1yr At-Large Dir.), Jo L Keener KE7NSB (2yr At-Large Dir) Ron Litt K5HM (Radio Sport), Eddie Runner NU5K Webmaster, Cameron Mitchell K5CAM, John Chauvin K5IZO Newsletter Editor/Parliamentarian, Pete Sauermilch KD5QPX, John Moore KK5NU VE Liaison

Reports:

1.1 A motion was made and passed to accept January’s Minutes.
1.2 Records have been gathered for the year-end audit. The 2015 Banquet cost the club approximately $2,000, but there was ~$1250 in donations, otherwise the cost would be ~$3200. This year 2016, the banquet cost very close to $3,000. The consensus seems that this cannot continue and the issue was tabled till after the Hamfest. A motion was made and passed to accept the Treasurer’s Report. The Treasurer was asked to provide financial information for past Banquets.

Old Business:

2.1 Hamfest: There are questions how much the club will get back because of table issues. Other issues are one kitchen will not get used and a letter needs to be generated.
2.2 There are questions whether there is a Hamfest budget with line items, which will be discussed during the Hamfest meeting.
2.3 The Newsletter normally comes out a week before the meeting but this month the newsletter was delayed.
2.4 John K5IZO reported great progress in untangling the table vendor issues. The greatest unknown was what has transpired.
2.5 Ron Litt said he needed E mails from club members and other that paid by Pay pal, Eddie NU5K said that he would provide.
2.6 Next meeting will be February 11th will feature Emergency Communications ‘GO Kit’
2.7 March 10 will be homebrew contest
2.8 The April meeting will feature Marc Abramson from ABR Industries.
2.9 May meeting: Museum Ships will be part of it. A coordinator is still needed.
3.0 Hamfest booth kit. Ron Litt showed a large ARRL bag with ARRL drop cloth and the club flag will be included. After the Hamfest this kit will be stored in the storage locker.
3.1 Membership level is staying static. There were ideas to include other clubs during the Tuesday night net.

New Business:

4.1 Discussion of Donation committee has been tabled till after the Hamfest

Meeting adjourned at 10:07am

Submitted by Recording Secretary Michael Monsour AC0TX

“Where in the world is” and “Radiosport”

See Editor’s Note on Page 2.
These articles will resume next month.
“Sherman! Set the Wayback Machine for Bonn, Germany 1886,” requests Mr. Peabody on The Rocky and Bullwinkle Show. “We are going to visit Dr. Heinrich Hertz at the University”. If only we could do just that, time travel, wow! However, the only way we can go back in time is thru contemporary articles, books and pictures. For me, researching the beginnings of antennas (and radio, really) was quite shocking (pun intended). You see, the basis of RF experimentation for Dr. Hertz was the electrical “spark”. Moving forward in time, to just inside the 20th Century, the method of transmission for wireless telegraphy communication, including Hams, was also “spark”. Spark based communication has a nomenclature of its’ own. Words like brushing, decrement, EMF reception factor, wave train and Signal to Stray Ratio are quite commonplace and need to be defined during any research. Spark, due to the mechanical method of generating higher frequency pulse, was limited to 200 thru to 600 Meters. We know this as 1.5MHz to about 500 KHz. Currently the AM broadcast band.

Ward Silver, in his 2014 Greater Houston Hamfest presentation, delineated Ham Radio history into 5 Generations…the first, 1901 to 1924, he called “Spark and Mad Scientists”. With that moniker I completely concur. This time period is the focus of this article - Part 1.

**Antennas Determine the Operating Frequency**

Simply, a spark is a pulse of energy. A sharp pulse, like a spark, contains a wide band of frequencies. That is why your car’s ignition noise, if you have that problem in your HF mobile set-up, is typically heard on many bands. For the spark based Ham in the 1900’s, there was a legal requirement to limit the spark’s wide bandwidth. In the technical descriptions written about spark transmission systems, the antenna was described as one of the “determining factors” of the final frequency of the “wave train”. The antenna, connected directly to the spark transmitter’s output LC “tank circuit”, had a major influence on the output frequency. As a circuit element, the antenna was an additional “capacitor” with the physical antenna wires being one capacitor plate and the Earth being another (See Fig. 1). Any changes in the antenna length or height would affect the output frequency. One comment in QST in 1922 was that hams with “longer aerials” were the cause of violations of the Radio Act of 1912. This law prohibited hams from transmitting with more than 1 KW on wavelengths greater than 200 Meters.

From a hobbyist stand point, Amateur Radio was at its’ utmost infancy in the early 1900’s. Homemade Spark gap transmitters and simple cat whisker receivers connected to “iron wire” were the means to getting on the air. Focusing specifically on antennas, you have the ‘MO’ of the day….put up as much wire as you can, as high as you can and then tune it to get the most out of it. QST March 1992 spoke of these initial antennas: “Antenna (Aerial) technology was primitive, the main idea being to get as much wire as high into the air as possible, commonly in the form of a T or inverted L, and maximizing its RF-current drain as indicated on the station RF meter.” Bigger and higher were the goals of all Amateur Radio antenna builders. Large antennas required an appropriately sized structure to support this antenna high above Earth -- (See Fig 2 and 3). Looks like we continue to have the same antenna ‘MO’ as those hams of last century – Bigger and Higher!

**Figures from a 1918 U.S. Army Signal Corps Pamphlet, “The Principles Underlying Radio Communication”**

**Next time…. Antenna Origins - Part 2 How the Audion Vacuum Tube Changed Antenna Design**

The purpose of The Radio Hotel is to give you a practical kickstart into exploring the workings of antenna systems. It is a series, so go back and read the previous columns to get the whole picture, as one month relies on the previous month’s information. Google the buzz words and find out what they mean. Read up on antenna system theory to see how it all works together. You will be glad you did.

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Fig. 1

Fig. 2

Fig. 3
**BVARC Rag Chew Net**

01/20/16, K5LKJ (NCS), KB9FOP (Katy), KF5TFJ, W5TKZ, KB5SDU (Natchitoches, LA), K5LJ, KG5BMS, KE5OBY, AA5OA, W5TOM, AF5T, W5RH, AA0ST (Dickinson), KG5GLX (Tiki Island). (14 Check-Ins)

Solar Cycle 24: SFI = 100, SN = 55, A = 11, K = 5

01/27/16, K5LKJ (NCS), AA5OA, W5TKZ, KF5TFJ, W5TOM, KE5OBY, K5LJ, K5IZO/5 (Jasper), WA5CYI, W5HFF (T), AF5T, N5EKW, AF5XL. (13 Check-Ins)

Solar Cycle 24: SFI = 116, SN = 61, A = 4, K = 1

02/03/16, K5LKJ (NCS), W5TOM, K5LJ, AA0ST (Dickinson), KD5O, AA5OA, AF5T, W5TKZ, KE5OBY, KF5YYZ, WN5A. (11 Check-Ins)

Solar Cycle 24: SFI = 112, SN = 52, A = 14, K = 1

02/10/16, K5LKJ (NCS), W5TKZ, W5HFF, K5IZO, K5LJ, AF5T, KE5OBY, W5RH, AA5OA, N5EKW (Katy), AA0ST (Dickinson), WB9FOP (Katy).

(Solar Cycle 24) SFI = 112, SN = 79, A = 10, K = 0

02/17/16, K5LKJ (NCS), W5TOM, W5TKZ, AA5OA, KE5OBY, W5HFF, K0NM/5 (RCS: London, England, UK), KC5JAR (Katy), K5LJ, AF5T, KG5JPG (Galveston), KF5ONT, K5IZO, WD6CQO (Nederland) (14 Check-Ins)

Solar Cycle 24: SFI = 99, SN = 49, A = 38, K = 3

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

Come join in the conversation each Wednesday evening.

Regards. John K5LKJ

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**BVARC Monday Night NET Updates**

Don’t forget the BVARC Monday Night Net starts at **8 pm** on 146.94 (167.9). The order of check-ins starts with mobile units first then fixed stations. If you have something for the net, make sure you let Net Control know about it when you check in. We are looking for Net Control Operators. Contact Rick, W5RH, if you are interested. Here are recent check-ins with control-ops:

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<th>Date</th>
<th>Name</th>
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<td>K5hm</td>
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<td>KF5HDF</td>
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BRAZOS VALLEY AMATEUR RADIO CLUB

This newsletter 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 newsletter every 3 or 4 months. Similarly, the “Eating Schedule” will be published every 3 or 4 months unless there is a change.

General membership dues are $25.00 per year, with student dues $10.00 per year, additional family members $5.00 per member per year.

Club meetings are normally held on the 2nd Thursday of each month at 7:30 p.m. at the Sugar Land Masonic Lodge, 421 Eldridge Rd, Sugar Land, 77478. Check the above website for any possible changes.

BVARC also administers amateur radio license exams on the 2nd Tuesday of each month at 7:00 p.m. at the Houston Community College’s Scarcella campus in Stafford.

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

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

To obtain information about joining BVARC or its activities, contact the club’s “Elmer;” Ross Lawler, W5HFF at 281-701-7602 or see the BVARC website: www.bvarc.org

Other contacts include:
President:, Mike Hardwick, N5VCX, n5vcx@att.net
Newsletter Editor, John Chauvin, K5IZO, k5izo@yahoo.com

VOLUME 40, ISSUE 3 MARCH 2016

BVARC General Membership Meeting – Thursday, March 10, 2016
Greater Houston Hamfest – Friday and Saturday, March 18 & 19

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