



BRAZOS VALLEY AMATEUR RADIO CLUB



AMATEUR RADIO FOR SOUTHWEST HOUSTON AND FORT BEND COUNTY

AUGUST 2016

VOLUME 40 ISSUE 8

I Scream. You Scream. We all Scream for ICE CREAM!

'Nuf said. The August meeting is our annual Ice Cream Social, so bring your golden spoon and a healthy appetite. This meeting brings out folks you may not have seen in a while. The whole family is invited.

PS: Blue Bell is back!



About the July meeting...



We had a great turnout to hear our special guest speaker, Kyle Brewer, AE5IJ, talk to us about many, many interesting things related to the International Space Station. Kyle is an Operations Support Officer for NASA and an active ham, and his unique view points had all on the edge of our seats. He obviously loves his job.

We would still be there listening to him but for the fact he had to catch a flight to Moscow (Russia, not Idaho) the next day.

If you missed this one, you missed a great presentation. Thanks Kyle.



Brazos Valley Amateur Radio Club Board of Directors Meeting Dates and Times for 2016

August 6 th , 2016	9 to 10:30 am	BOD meeting	Bayland Park
September 3 rd , 2016	9 to 10:30 am	BOD meeting	Location TBD
October 8 th , 2016	9 to 10:30 am	BOD meeting	Bayland Park
November 5 th , 2016	9 to 10:30 am	BOD meeting	Bayland Park
December 3 rd , 2016	9 to 10:30 am	BOD meeting	Bayland Park



Prez Says

Well the summer is almost over and it couldn't come none too soon. BVARC is very busy throughout the summer with Museum Ships Weekend, Field Day and the Ice Cream Social. It takes a lot of effort by many club members to make these events successful so when you see someone that worked on those, thank them for their hard work.

Field day was a great success even with the number of contacts lower than last year. The event was so successful that the Pecan Grove Volunteer Fire Department has invited us back again next year. I want to thank everyone for a great turnout for Field Day and making it another successful event.

I also want to thank Kyle Brewer, AE5IJ, for an excellent program last month. Kyle is very active in amateur radio and I was glad that he was able to make time with his busy schedule with NASA.

Coming up this month is the annual Ice Cream social. It is a great time for everyone to get together and discuss the latest and greatest in ham radio. If you would like to help with the Ice Cream social give Michael Monsour a call and let him know. I know he would appreciate your help.

I managed to go to a "small" hamfest in Williams, Arizona. I had a great time seeing what a small amateur radio club can do with what they have in a rodeo arena. They had programs, speakers and a balloon launch. If you every get a chance to be in Williams, Arizona during the middle of July, make sure you stop by.

Don't forget elections are coming up in November so be thinking on which position you will be volunteering for.

Hope to see everyone at the next meeting.

73, N5VCX



Results of the July 12th 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, July 12, 2016 at HCC's Scarcella Science & Technology Building here in Stafford, TX.

MEMBERS OF THE VE TEAM:

Richard Goldy, K5GOL
John Moore, KK5NU

Jonathan Guthrie, KA8KPN
George Ontko, KM5VP

Larry Jacobson, K5LJ
Randy Pugh, AA5OA

Six examination elements were administered during the evening to three applicants. Three new Technician class licenses and two upgrades to General class were attained, with the total number of elements passed being 5. The overall "pass rate" for the evening was 83.33%.

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

Dinah J. Brown	- {KG5ONH}	- Technician
Michael T. Dome	- KG5NOV	- General
Tochokwu U. Ezento	- {KG5ONG}	- Technician
Ping Hao	- KG5OFP	- General
Michael C. Jacobson	- {KG5ONF}	- Technician

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.

BVARC Historical Vignettes – Ice Cream Social

Allen Mattis N5AFV, Club Historian

We all know that BVARC has a reputation of being as much an eating society as it is an amateur radio club, and the August Ice Cream Social is one of the club's most well-attended meetings. How did this popular event start and how long has BVARC had an Ice Cream Social?

The first BVARC Ice Cream Social was actually held in July and not August. The idea was conceived by Bill Todd-Brown N5MPN, who was program director at the time. The June 1990 B-VARC Bulletin contained an announcement about the upcoming July 12, 1990 general membership meeting and the club's nets and repeater provided additional publicity.

A total of 77 club members and guests attended the first Ice Cream Social setting a new record for the highest number of people attending a BVARC meeting. Ten gallons of ice cream were brought to the meeting and only 1 ½ quarts were left at the end. Most of the ice cream was homemade. Of course there were also ice cream toppings, cakes, cup cakes, brownies, cookies and other similar items to eat with the ice cream.

The program at the meeting consisted of watching VCR tapes of a recent BVARC picnic and of a Houston area remote control model airplane meet. A number of club members brought remote-controlled model airplanes, boats and racing cars to show the attendees. It was an excellent meeting and it was clear to all that the Ice Cream Social should become an annual affair.

The Ice Cream Social was held in July for the next two years, and had a similar format. In 1993, the Ice Cream Social was held in August, but returned to a July date from 1994 through 1997. In 1998 the decision was made to move the Ice Cream Social to August. A number of club members said it was hotter in August than July, and that the Ice Cream Social is a good event to have in the hottest month of the year. The BVARC Ice Cream Social has been held at the August general membership meeting since that time.



BVARC Rag Chew Net

06/29/16, K5LKJ (NCS), W5TKZ, KF5TFJ (R), K5IZO/5 (Jasper), W5HFF, W5TOM, K5LJ, KF5PHA, WA5CYI. (9 Check-Ins)

Solar Cycle 24: SFI = 74, SN = 0, A = 6, K = 1

07/06/16, K5LKJ (NCS), W5TKZ, AA0ST (Dickinson), W5HFF, W5TOM, AA5OA, WA5KXG, KE5CG (New Iberia, LA), K5IZO, K5LJ, WB4KTF, KF5TFJ, N5EKW (Katy), KC5JAR (Katy), KD5O. (15 Check-Ins)

Solar Cycle 24: SFI = 79, SN = 29, A = 4, K = 1

07/13/16, K5LKJ (NCS), W5TKZ, W5HFF, W5TOM, K5IZO, KF5TFJ, AA0ST (Dickinson), K5LJ, K8DIJ, AF5XL. (10 Check-Ins)

Solar Cycle 24: SFI = 93, SN = 63, A = 21, K = 1

07/20/16, W5TKZ (NCS), W5TOM, W5HFF, K5IZO, K5LJ, KF5TFJ, W5TKZ, WD6CQO (Nederland), K0NM, AF5XL, WA5KXG, W5RH, W1BG, AA5OA, KF5ONT, KF5PHA. (16 Check-Ins)

Solar Cycle 24: SFI = 106, SN = 58, A = 10, K = 2

(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

Minutes of the July 9th, 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 at 9:02 on July 9th, 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 ACØTX (Rec.Sec./Quart.), Jerry Muller K9GEM (1yr At-Large Dir.), Jo L Keener KE7NSB (2yr At-Large Dir), Cameron Mitchell K5CAM, Ron Litt K5HM (Radio Sport), Pete Sauermilch KD5QPX

Reports:

A motion was made and passed to accept the June Minutes.

A motion was made and passed to accept the Treasurer's report. The Field Day expense came in under budget. No expense for KK5W MSWE.

Old Business:

- 2.1 Hamfest 2017, there is a planning meeting after this Board meeting. BVARC will be at the Fairgrounds for three years. Hamfest Website will go live in August or September.
- 2.2 Museum Ships Weekend Event got rained out. There might be a monthly work party at the ships. MSWE 2017 will be June 2nd, 3rd & 4th.
- 2.3 Field Day wrap up. There is a need to give recognition to the benefactor and a tax exemption. A Letter of Appreciation needs to be sent to the Fire Department. Field Day 2017 will again be at the Pecan Grove Fire Station.
- 2.5 July general meeting will be Space Communications or ISS Communications.
- 2.6 August will be Ice Cream Social: Michael Monsour volunteered to head the Ice Cream Social. The budget will be higher because of a desire for Blue Bell ice cream.
- 2.7 September meeting will feature a Jon Noxon presentation.
- 2.8 Masonic Lodge contract renewal: some of the lights have been repaired; some other issues need to be resolved.
- 2.9 Winter Field Day: Scott Medbury is working on Constellation Field on Jan 27.
- 2.10 The consensus is to have a phone conference call for September.
- 2.11 There were discussion regarding Field Day antennas about purchasing antennas and repairing the rest.

New Business:

- 3.1 Jerry Muller addressed 'inappropriate' commentary going on the repeater. BVARC has no control over the repeater. Michael Monsour addressed 'inappropriate' postings on the reflector. The reflector needs written guidelines.
- 3.2 Next Board meeting / Hamfest meeting will be August 6th.

Meeting adjourned at 10:05 AM

Submitted by Recording Secretary, Michael Monsour ACØTX



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 Mark, mark@mcgrath-co.com, if you are interested. Here are recent check-ins with control-ops:

4/18 - 26 - Ron, k5hm	5/23 - 23 - Clint, kf5hdf	6/27 - 23 - Clint, kf5hdf
4/25 - 28 - Clint, kf5hdf	5/30 - 12 - Terry, k5pgf	7/4 - 13 - Dave, n5ekw
5/2 - 28 - Dave, n5ekw	6/6 - 23 - Dave, n5ekw	7/11 - 18 - Steve, kf5yyz
5/9 - 31 - Steve, kf5yyv	6/13 - 18 - Steve, kf5yyv	7/18 - 20 - Ron, k5hm
5/16 - 24 - Ron, k5hm	6/20 - 22 - Ron, k5hm	7/25 - 20 - Clint, kf5hdf

BVARC QUICK STATS

Date	Members	Newsletters	Life Members
7/25/16	197	197	66

Where in the World is . . .

Macau (XX9)

CQ Zone 24

Macau, also spelled Macao is a small peninsula in mainland China, across the Pearl River Delta from Hong Kong.

A Portuguese overseas territory until 1999, it reflects a mix of Portuguese and Chinese influences. Its giant casinos and extravagant malls have earned it the nickname, the "Las Vegas of Asia." In 1999, it became the Macao Special Administrative Region of the People's Republic of China. It has an estimated population of about 650,000 crowded into a 12 square mile area.

The Portuguese arrived in 1513 and established trading rights with the Chinese. As commerce grew, they began to exert more influence over the local inhabitants. By 1564, Portugal commanded western trade with India, Japan, and China.



In 1576, Pope Gregory XIII established the Roman Catholic Diocese of Macau. The Portuguese in Macau were eventually permitted to form a Senate to handle various issues concerning their social and economic affairs under strict supervision of the Chinese authority, but there was no transfer of sovereignty.

By the 1840's, they established their own self administration. Macau prospered as a port but it was the target of repeated failed attempts by the Dutch to conquer it in the 17th century. On June 24, 1622, the Dutch attacked Macau with the hope of turning it into a Dutch possession. The Portuguese repulsed their attack and the Dutch never tried to conquer Macau again.

During WW II, Portugal's neutrality was mostly respected by the Japanese except for some minor incidents. After the establishment of the People's Republic of China in 1949, the Beijing government declared the Sino-Portuguese Treaty invalid as an "unequal treaty" imposed by foreigners on China.



Sovereignty over Macau was transferred to China in December 1999. The treaty stipulates that Macau operate with a high degree of autonomy until at least 2049, fifty years after the transfer. Macau is among the world's richest regions, and as of 2015 its GDP per capita by purchasing power parity is higher than that of any country in the world, according to the World Bank. It became the world's largest gambling center in 2006, with the economy heavily dependent on gambling and tourism.

QRZ.com reports 114 licensed radio amateurs in Macau. Visiting hams to Macau report, it is difficult to find a suitable spot for operation in Macau surrounded by mountains, except in southern direction. On top of that there can also be heavy local QRN due to the high degree of development.

Reporting from the Dark Side,
Ron, K5HM

The Radio Hotel[®] - 50 Ohm Direct Fed Yagi's

By Rick Hiller – W5RH

You can definitely teach an old dog new tricks...I know, cause this old dog learned a few new tricks about Yagi-Uda's and their feed impedances. I built a few Yagi's in the past and recently embarked on building a 12 meter, 3 element Yagi for QSO's with my friend in VK3. I was all set to cut metal, when I read, in a recently obtained book, **Array of Light** by N6BT, Tom Schiller, about 50 ohm direct fed Yagis. Why was this so enlightening? Because, in the many years of antenna designing and building I (and the books I was reading) focused on maximum gain and the highest front to back (F/B) ratio. The feed impedance was just accepted as what occurred in those two design conditions.

The feed Z in the "max gain and F/B configuration" was, typically, quite low... in the 10 to 15 ohm range. This low feed Z required some type of transformation from the 15 ohms to 50 ohms (the typical coaxial cable Z) in order to have a low system SWR. T matches, Gamma matches, Omega matches (all impedance step-up devices) were the norm and rather a pain in the butt to physically implement and tune (at least for me). But, N6BT and his designers found the direct match condition (and so had Mosley many years back), but no one said didly squat...well, until I re-read a few antenna books. Sure enough, in the 1955 (seventh edition) version of the ARRL Antenna Handbook, there it was plain as day. The chapter on multi-element arrays talked about Yagis, the varying element spacing and the associated gain and front to back curves. Although highlighting the max /low feed Z configuration, the graph's curves also showed that at a slight reduction in gain and F/B the feed Z could be 50 ohms.

With the use of EZNEC (or any other NEC based analysis) you can have a bit of fun and model a direct fed Yagi. You will notice a changes in gain, F/B and feed Z, etc. by varying the element lengths and element spacing. Notice that, as you vary the attributes, that the director location plays a large part in determining the feed impedance.

What is the benefit of a 50 ohm direct feed Yagi? As N6BT says in his book, VSWR bandwidth is wider and the higher Z decreases the element current, possibly creating a more predominant E field. Probably, in my opinion, the matching device elimination is the greatest benefit.

What is the difference in the classic Yagi design and the direct feed design? Gain and F/B suffer slightly according to the charts in the **Bill Orr, W6SAI – Beam Antenna Handbook**, however, Schiller touts the operational performance as being better than the lower feed Z Yagi's in his contest station situation. I have no anecdotal experience to challenge that claim, but looking at the performance of HC8A over the years, he just might be right.

If you are planning on building or even buying a Yagi, look at those with the direct 50 ohm feed. The SP7GXP multi-band Yagi's, that Pat (KJ5Y) is selling, have direct feed. The included feedpoint choke doesn't count as an impedance matching device, but does help to keep feedline radiation at a minimum to provide maximum symmetry in the radiation pattern.

References:

Array of Light – Third Edition, Tom Schiller – N6BT (self published)
ARRL Antenna Handbook – Seventh edition – but, any later edition has the applicable charts
Beam Antenna Handbook – William Orr – W6SAI -- Radio Publications/CQ Press

Enjoy your hobby. GL ES 73 DE W5RH

Next Time – VHF Antennas from Thumbtacks and Wires

*The purpose of **The Radio Hotel** is to give you a practical kick start into exploring the workings of antenna systems. 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.*

2016 Officers:

President/ Acting President
Michael Hardwick, N5VCX
n5vcx@att.net

Vice President
Jon Noxon – KF5TFJ
jon@noxon.cc

Corresponding Secretary
Steve Friedman, KF5YYZ
Kf5yyz@outlook.com

Treasurer
Donovan Balli, KG5BDZ
dballi@mail.com

Recording Secretary:
Michael Monsour, AC0TX
msircg@gmail.com

2 Year At-Large Board
Jo Keener – KE7NSB
jo.l.keener@juno.com

2 Year At-Large Board Member B:
Scott Medbury KD5FBA
smedbury@windstream.net

1 Year At Large
Jerry Muller, K9GEM
gmuller885@aol.com

Regularly Scheduled Club Happenings:

General Meeting

Second Thursday each month, 7:30 PM
2511 Eldridge Rd, Sugar Land, 77478, Eldridge Park Conference Center (Check page 1)

Board of Directors Meeting

First Thursday of each month, 10:00 AM (For Sept., check website)
Bayland Park Community Center
Bayland Park, 6400 Bissonnet,

Volunteer Examiner Program

BVARC administers Amateur License Exams on the 2nd Tuesday of each month at the HCC Scarcella Technology Campus, 10141 Cash Rd. in Stafford. Contact John Moore, KK5NU jwm@hal-pc.org

Rag Chew Net

3910 KHz +/-3KHz Wednesdays
at 7:00 p.m.

Public Service Net

Monday night on 146.94 (167.9) at 8:00 PM

Advertising in the BVARC Newsletter

Rates are as follows; \$25 per month for 1/2 page, \$125 for six months and \$250 for one year. The rates for a full page are as follows; \$50 per month, \$250 for six months and \$500 for the year.

BVARC EATING SCHEDULE

SATURDAY MORNING BREAKFAST

IHOP, 7:00a.m., SW Freeway inbound service road, near Kirkwood.

OTHER HAM GROUPS:

WEDNESDAYS – WEDNESDAY LUNCH BUNCH

LUBY'S CAFETERIA, 10:30a.m. to 12:00Noon +, South Post Oak Road, just south of the I-610 Loop in Meyer Park Shopping Center.

WEDNESDAYS – AMSAT & QRP GROUP

PAPPAS BARBECUE. 11:30a.m., SW corner Westheimer & Gessner.

Hamfests

(within 200 miles of Houston)

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

08/05/2016 | Texas State Convention (Austin Summerfest 2016)

Location: Austin, TX

Type: ARRL Convention

Sponsor: Austin ARC & Texas VHF-FM Society

Website: <http://www.austinsummerfest.org>

10/01/2016 | HamEXPO

Location: Belton, TX

Type: ARRL Hamfest

Sponsor: Temple Amateur Radio Club

Website: <http://tarc.org/hamexpo/>



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 Printing, labeling and mailing – Cameron Mitchell, K5CAM

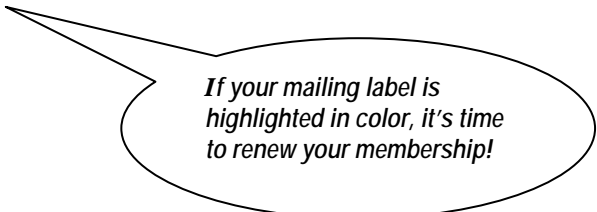
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**BRAZOS VALLEY
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SUGAR LAND, TX 77487-2997
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FIRST CLASS POSTAGE

Monthly General Membership Meeting & ICE CREAM SOCIAL – Thursday, August 14



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