

the Radio Flyer, *a BRARA Newsletter*

April 2016



BRARA Calendar:

Fri 01-Apr-2016 April Fools Day

09:00-13:00 Sat 02-Apr-16

Ham Shack Work & Radio Day

19:30 Mon 04-Apr-16

Informal Net on 145.29 [110.9]

followed by South County NBEMS Net

19:00-21:00 Tue 05-Apr-16 Club Meeting @ West Boca Library

09:00-12:00 Wed 06-Apr-16

Ham Shack Work & Radio Day

09:00-12:00 Sat 09-Apr-16

Ham Shack Work & Radio Day

19:30 Mon 11-Apr-16

Informal Net on 145.29 [110.9]

followed by South County NBEMS Net

09:00-12:00 Wed 13-Apr-16

Ham Shack Work & Radio Day

Fri 15-Apr-2016 Tax Day

09:00-12:00 Sat 16-Apr-16

Ham Shack Work & Radio Day

Sun 20-Mar-2016 Spring Begins

12:00 Noon Sun 17-Apr-16

Soft Deadline for Newsletter

19:30 Mon 18-Apr-16

Informal Net on 145.29 [110.9]

followed by South County NBEMS Net

09:00-12:00 Wed 20-Apr-16

Ham Shack Work & Radio Day

Sat 23-Apr-2016 1st Day of Passover

09:00-13:00 Sat 23-Apr-16

Ham Shack Work & Radio Day

19:30 Mon 25-Apr-16

Informal Net on 145.29 [110.9]

followed by South County NBEMS Net

09:00-12:00 Wed 27-Apr-16

Ham Shack Work & Radio Day

Sat 30-Apr-2016 Last Day of Passover

09:00-13:00 Sat 30-Apr-16

Ham Shack Work & Radio Day

Sun 01-May-2016 May Day

19:30 Mon 02-May-16

Informal Net on 145.29 [110.9]

followed by South County NBEMS Net

19:00-21:00 Tue 03-May-16 Club Meeting @ West Boca Library

09:00-12:00 Wed 04-May-16

Ham Shack Work & Radio Day



This Month's Speaker

At the 05-Apr-2016 Meeting, Jerry Zaza gave us a status report on the New Shack and introduction to Amateur Radio Digital Communications (AMPRNet-TCP/IP Networking for Amateur Radio). Jerry has obtained an allocation for BRARA (a block of addresses assigned to hams interested in radio networks)

At the 03-May-2016 Meeting, we will begin to plan for Field Day 2016 at the New Shack.



Repeater, HSM, & Ham Shack News

The weekly worker group meets almost every Wednesday and Saturday morning roughly between 0900 and 1300.

Both Analog repeaters are working. The 2m repeater power amp has been operating with 85 w output.

Repeater 2m/70cm linking as well as the time stamp are still works in progress Testing and tweaking of the new Controller continues.

We have the registration number for the additional 70 cm repeater controller. Manual is forthcoming.

The Digipeater is up and running. The packet repeater is a work in progress.

We have secured a limited internet connection at the Shack for spotting -no streaming downloads.

Plans and preparations for the new shack trailer are proceeding.

QSL Report ⁱⁿ

As we closed out March, N4BRF had logged in 2,309 QSLs/7,448 QSOs (31.0%) on LoTW.

DXCC Account Status: New this month: Palmyra & Jarvis Isls (KH5). Awards received: Mixed, CW, Phone, 17m, 15m and 10m.

WAS Account Status: New this month: WI 6m CW. Awards issued: Mixed, 20m, CW, Phone, Digital, Triple Play, RTTY . We still need:

- AK, ID for 40m
- AK, WV for 15m
- WY for 20m Phone
- NV for 20m CW.
- AK, DE, ID, ME, NV for 40m CW.

We have received the following QSOs from Field Day activities:

- 172 (+3) QSLs from 2012,
- 177 (+1) QSOs from 2013
- 241 (+1) QSOs from 2014
- 261 (+2) QSOs from 2015

VUCC Account Status: Nothing new this month.

Update at the next Club Meeting.



A Call by Any Other Name W8IZC

They tell us every amateur station has a call sign issued systematically by the FCC. But this was not always true. It started that way 50 years ago, but got side tracked a few times and then it got really confusing! The number in your call depends on where you are located when you are first licensed.

Amateur stations, after about 1935, started with W and a number, but the FCC ran out of suffixes when they got to ZZZ. They re-started with K and continued until they again got to ZZZ, and again ran out of call signs. Another restart began with a WA prefix and continued through WB's. When they ran out of WB's they realized additional W calls were already issued, so they jumped to WD in some call areas, then they restarted again with KA call signs.

So when first licensed, we have calls beginning with W, K, WA, WB, WD, KA, KB, KC, KD and KE. And there are special provisions for Puerto Rico (WP), Alaska (KL) and Hawaii (KH). Each call sign prefix is followed by a number (call area) and then a suffix.

Formerly, when you upgraded your class of license, you could request a new call sign, and the FCC issued call signs by class of license.

-Technicians received new 2x3 (2 letters by 3 letters) -General class received N 1x3 (1 letter by 3 letters) -Additional upgrades allowed 1 x 2, 2 x 1 or 2 x 2 call signs. This is now done with the vanity call program, but there are still license class call sign limitations. All new licensee's are issued 2x3's, but once licensed may request 1 x 3 or 2 x 3 or other class specific call signs.

Many older operators keep original call signs while newer operators change call signs for several reasons: a dislike of the original call, your initials were available, etc. Here are some examples.

Vanity calls: W8JV K8MSH
 AB8AA W3JL W8YSU FCC
 issued KB8GAE WA8ZIP N8DUP
 KE8ADY KD8FAP WD8KNJ K3LR
 KC8WY

Some calls are assigned to a club or special event. W8QLY (MVARA)
 W9IMS (Indianapolis Motor Speedway)
 K8YSU (YSU Club) N8DXE (DX Engineering)
 N5UDE (never mind!)

In the US, there are 10 call areas. Calls vary country to country but most use letter-number-letter combinations. After operating awhile, you will begin to recognize most of the combinations/prefixes for US and Canadian station, as well as those of other countries.



Chirp Live CD KD4NZF

If you have one of the Chinese HT's you probably have run into the Chirp software for programming them. The Chinese radios are notorious for being difficult to program by hand. Mark, K8MSH, did a program at one of our meetings to introduce us to the program.

Some folks have had trouble setting up and using the program. There are several issues that come into play. One is the programming cable supplied with some of the radios. It uses a chip to do a Serial to USB conversion. You'll be shocked to learn this, but some Chinese companies have counterfeited the chips, and some of those counterfeits have shown up in the programming cables. This causes issues as the genuine manufacturers fight back by rewriting the driver software to detect the fakes. Also some Apple users have reported security issues popping up during installation.

-----Regardless of the cause, there may be an easy solution.

On the download page for Chirp, <http://chirp.danplanet.com/projects/chirp/wiki/Download> if you scroll to near the bottom of the page, there is a link for a live CD. The live CD is a file you burn to a CD (or DVD) that is a bootable disk. It is written in Linux and eliminates issues with apple/windows/drivers because it is using its own operating system. When it boots your computer it creates a pretend drive in memory called a virtual disk and installs itself in the virtual disk. It does not need your operating system and makes no changes to it.

The disk seems to be pretty well written - in a test on an old Thinkpad it started up with no issues. Because you are booting from a CD it is slower than your normal start up, don't be surprised if it takes a minute or so for it to start. Once started the program operates as it would normally. Hope this helps if you have been having trouble getting Chirp installed. Of course using it is another can of worms!

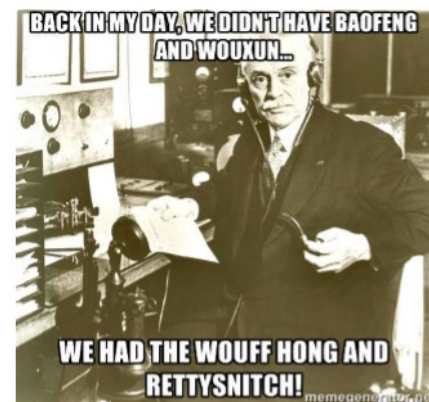
(Editor's note: You can also avoid the dreaded counterfeit chip problem by using version 3.2.0.0 of the Prolific chip driver software. You can find more detailed information and the driver at: http://www.miklor.com/COM/UV_Drivers.php. Also, set the Windows automatic update feature on your computer to "manual" so Windows doesn't try to update the driver on its own.)



Calculate This!

Welcome to CALCULATOR EDGE, an online FREE Engineering Calculators for Engineers and Students worldwide. The website features more than few hundred calculators for solving complex equations and formulas in fields of Electrical, Mechanical, Chemical, Electronics, Civil, Metallurgy, Oil & Gas, Optical, Plastics, Ceramics, Physics, Math and many more...

<http://www.calculatoredge.com/>



Monday Night Nets

KG4FUR

BRARA now runs three Monday Night Nets on the 145.290 MHz -0.600 [110.9] repeater:

- ⇒ New HAMS Net: 19:00-19:30.
- ⇒ BRARA Informational Net: 19:30-20:00. Out-of-Area Amateurs may check-in via EchoLink. Our Node is 826953.
- ⇒ South County NBEMS Net 20:00-20:30. Analog Voice and FLDigi/FLMsg mixed mode.

NBEMS KG4FUR

For more information and the latest Guide and Troubleshooting, go to www.qsl.net/k4wrc/PBC-BASIC-NBEMS.html or simply Google "Palm Beach NBEMS"

Scheduled Nets

Mon	20:00	S County	145.290 -0.6 110.9
Tue	19:30	PBC NBEMS	147.285 +0.6 103.5
1 st / _{3rd} Sat	10:00	Knights of Rnd Tbl	146.550 Simplex

Other Local HAM

Analog Repeater Nets

Daily 18:00 SEFL Traffic: 146.61 MHz
Tue 19:00 Boynton CERT: 443.1 MHz
Tue 19:30 Boca CERT: 145.225 MHz
Wed 19:00 SC-ARES: 147.225 MHz
Thu 19:00 WX4SFL: 444.025/444.850

Scheduled DMR Nets

Day	EST	Talk Group
Sun	1900	TG-310 (TAC 310)
Mon	1500	TG-13 (EN) UK Tech
Wed	2100	TG-03 (NA) NATEch
Sat	1200	TG-01 (WW)

Local DMR Repeaters

Location	Rx Freq	Color Code
Miami	442.225	1
N Dade	443.1250	10
Dania Bch	442.4000	1
Plantation	442.4250	1
Boca Raton	442.0000	8
Delray Bch	443.3000	1
Boynton Bch	442.3000	7 Shut Down
Lk Worth	444.4500	10
PBG	442.1000	10
Jupiter	442.6000	10 Pending
Palm City	440.7000	1

GMRS Repeater Database:

Check out www.myGMRS.com.

New Shack Committee

A committee was formed to supervise donations, planning, and implementation of the new shack trailer: K3LEW (Lew), W3EZB (Marcos), WA2VNV (George), WA8VSJ (Art), W4BFL (Jerry),

Club Repeaters

144.390 APRS Repeater
145.070 Packet Repeater
145.290 -0.600 [PL 110.9] EC-826953
442.875 +5.000 [PL 110.9]

Location: 26.39724 -80.09485
145.290 & 442.875 linking planned

Club Ham Shack

West Delray Regional Park
10875 West Atlantic Avenue
Delray Beach, FL 33446

Board of Directors

Scheduled Meetings

The new BRARA Board of Directors:

K4LEW (Lew), KG4FUR (Gerry),
K04XL (Bruce), N4CGC (Max),
W3EZB (Marcos), W4BFL (Jerry),
and W4WCD (Walt)

We hold weekly luncheon meetings at 11:30 Mondays (quorum permitting) at Miller's Ale House, 1200 Yamato Rd, Boca Raton, FL 33431. (561)988-9142 www.millersalehouse.com/location/east-Boca-ale-house

Donations & Contributions

Contributions to BRARA—a 501(c)(3) organization—are tax deductible as charitable donations. As you complete your membership renewal or begin your year-end tax planning, please consider making a donation to BRARA.

Planned Giving—Please also consider BRARA when updating or initiating planned giving (including charitable gift annuities, bequests, and gifts or retirement plan assets) and other assets.

Apparel Donations

\$10 donation-BRARA Name Plate with your Call Sign.
\$30 donation-BRARA Polo Shirt with your Call Sign.
\$40 donation-BRARA button down red denim shirt (long or short sleeve)

Membership Application & Renewal

- \$25 Full Membership
- \$5 Associate Membership
- \$5 Family Mbr w/License

Name: _____

Call Sign: _____

Address: _____

Phone: _____

Email: _____

ARRL Member: Yes No

Birthday: Month: _____ Year: _____

License Grade: _____ Exp Date: _____

Interests: Field Day Ham Fest

HF Digital DXing

VHF Packet CW

UHF Voice Contesting

EmComm Skywarn Public Svc

ARES MARS CERT

Award Chasing Ragchewing

Building & Experimenting DMR

Other: _____

Signature: _____

Return with Dues to BRARA at either:

BRARA
P.O. Box 480162
Delray Beach, FL 33448-0162

Or

Walt Dreyfus, Secretary
21512 Woodchuck Ln,
Boca Raton, FL 33428
(954) 481-5327

Flamingo Net / University of Miami

ARC Free Flea

Start Date: 04/16/2016
End Date: 04/16/2016
Location: Univ. of Miami Physics/
Gifford Arboretum Parking Lot
5101 San Amaro Drive
Coral Gables, FL 33114

Website: <http://www.FlamigoNet.8m.net>

Sponsor: Flamingo Net & University of Miami Amateur Radio Clubs

Type: ARRL Hamfest
Talk-In: 147.150 +600 (PL 94.8)

Public Contact: William Moore ,
WA4TEJ
1451 NE 102nd St Miami Shores, FL
33138

Phone: 305-751-1874

Email: wa4tej@juno.com

Cy Harris Memorial Free Flea

Start Date: 04/23/2016
End Date: 04/23/2016

Location: Collins Center
3900 NE 3rd Avenue
Oakland Park, FL

Website: <http://browardarc.net/free-flea>

Sponsor: Broward Amateur Radio Club

Type: ARRL Hamfest

Talk-In: 146.91 (PL 110.9)

Public Contact: Tony Becker ,
KK4GUU

3721 West State Road 84, Unit 102
Davie, FL 33312

Phone: 954-612-9303

Email: kk4guu@arrl.net

Free Laurel VEC Testing



Sun 01-May-2016, 1100-1300, Fire Station 28, 1040 RPB Blvd, Royal Palm Beach [PWARC] (1st Sunday of odd months).

Tue 12-Apr-2016, 1800-1930, Broward Gen MC, 1600 S Andrews Ave, Ft Lauderdale [BARC] (2nd Tue of every month).

Thu 12-May-2016, 1900-2100, Rutherford Com Ctr, 2000 Yamato Rd, Boca Raton, FL 33498 [BRARA] (Quarterly: Feb, May, Aug, Nov)

Welcome New Members:

KM4RBB Reuben Perez
KM4QN Todd Rowe

For more on BRARA
www.n4brf.org

Join us on Twitter [BRARA@N4BRF](https://twitter.com/BRARA@N4BRF)
and on Instagram [#BRARA_N4BRF](https://www.instagram.com/BRARA_N4BRF) as well as on Facebook.

Dayton Hamvention

Start Date: 05/20/2016

End Date: 05/22/2016

Location: Hara Arena
1001 Shiloh Springs Road
Dayton, OH 45401

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

Sponsor: Dayton Amateur Radio Association

Type: ARRL Hamfest

Talk-In: 146.94 & 146.91 alternate

Public Contact: Jim Tideman,
N8IDS

PO Box 964 Dayton, OH 45401-0964

Phone: 937-276-6930

Email: info@hamvention.org

BRARA Ham Shack

Key Rules ^{K4Lew}

To obtain a key for our ham shack you must be a member in good standing for a minimum of a continuous year and hold a general class license or above and go through a short training session with K4LEW (Lew), W4BFL (Jerry), W4WCD (Walt) or N4CGC (Max).

the Radio Flyer's Purpose

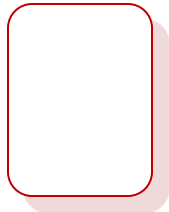
The purpose of this newsletter is to keep Club members and other interested Hams updated on Club events and Ham activities in the Greater Boca Raton Area. We hope you enjoy this month's *the RF* as much as we did publishing it!



the Radio Flyer

P.O. Box 480162

Delray Beach, FL 33448-0162



BRARA Club Member Name
Call Sign
Street Address
City, State Zip Code



Amateur License Refresher

It's probably been awhile since you took your Amateur License exam. Here are a few sample questions from the current question pools just to keep those synapses firing.

Extra Pool

E3A05

Which of the following describes a method of establishing EME contacts?

- A. Time synchronous transmissions with each station alternating
- B. Storing and forwarding digital messages
- C. Judging optimum transmission times by monitoring beacons from the Moon
- D. High speed CW identification to avoid fading

E3A02

What characterizes libration fading of an Earth-Moon-Earth signal?

- A. A slow change in the pitch of the CW signal
- B. A fluttery irregular fading
- C. A gradual loss of signal as the Sun rises
- D. The returning echo is several Hertz lower in frequency than the transmitted signal

General Pool

G4E09

What is the approximate open-circuit voltage from a modern, well-illuminated photovoltaic cell?

- A. 0.02 VDC
- B. 0.5 VDC
- C. 0.2 VDC
- D. 1.38 VDC

G4E01

What is a "capacitance hat", when referring to a mobile antenna?

- A. A device to increase the power handling capacity of a mobile whip antenna
- B. A device that allows automatic band-changing for a mobile antenna
- C. A device to electrically lengthen a physically short antenna
- D. A device that allows remote tuning of a mobile antenna

Articles for the Newsletter *KG4FUR*

Got an idea for an article? Or constructive critique? Want to share club news and events? How about writing a short 30-minute project idea? Your submissions to the Red Flyer are needed to help keep this one of the best club newsletters in South Florida.

Please send articles to
KG4FUR@N4BRF.org



New Shack/FD 2016 KG4FUR

We just completed a successful donation matching campaign and we are all congratulated on the donations received and our anonymous donor's generosity. That being said, this does not mean that we are "flush with cash" or that we can now "ease-off" on our appeals for donations. We still have a long way to go and any donation, no matter how small is appreciated. Equipment, materials and time are also appreciated.

Although our emphasis still remain on the new shack, we need to begin thinking about Field Day. As most of you know, we will be conducting Field Day at the new shack. The FAU Club will be running a separate operation on their Campus.

The change in location necessitates us changing our class from A to E (3E).

- Class A stations are "club or non-club stations" located in places that are not regular stations and do not use permanent facilities
- Class E stations are "home stations" using emergency power to transmit and receive. Class E may work all Field Day stations

Other Class E limitations include:

- No free VHF Station
- No Public Location 100 pt bonus
- No Public Info Table 100 pt bonus
- No Satellite QSO 100 pt bonus
- No GOTA Station bonus pts
- No Safety Officer bonus pts

We need to insure that we maximize the other bonus point options like Social Media. Join us on Twitter [BRARA@N4BRF](https://twitter.com/BRARA@N4BRF) and on Instagram [#BRARA_N4BRF](https://www.instagram.com/BRARA_N4BRF) as well as on Facebook. Others include: Media Publicity, Section Manager Message, W1AW Bulletin, Educational Activity, Youth Participation, etc.



Answers to Amateur License Refresher:

- E3A05 (A)
- E3A02 (B)
- G4E09 (B)
- G4E01 (C)



No Smoking
UNLESS YOU'RE A RADIO WITH A SHORTED CAPACITOR.



Ham Humor



Dos Equis Man

- He can send CW at speeds faster than the mind can comprehend.
- His log is hand written on parchment paper with gold columns.
- When he says "is this frequency in use," all others go QRT.
- When he works 20-meters, the over the horizon radars shut down out of respect.
- He has been known to request aurora events at will.
- His tubes never seem to age.
- His audio is cleaner than a classical music FM radio station.
- He copies RTTY by ear.
- He told Hiram Percy Maxim's father to buy the kid some radio parts.
- He let Elecraft copy HIS receiver design.
- He built his own Skimmer that identifies stations when they are still tuning up.
- WA8VJS, WA2VNV, W4BFL, K4LEW, KE4OBV, N4CGC and K4KGG call him for advice on antennas.
- He gave W4II DX lessons and helped him with Ed's first contact.
- The rocks that came out of the hole for his tower base are now known as Scarborough Reef.
- He has worked every country on the DXCC list...FROM every country on the DXCC list.
- He believes 48-hour contests are too short.
- 2 weeks ago he operated the NEQP, 7QP, IN QSO Party, and ARI contest and won them all.
- He is the most interesting ham radio operator alive.

We just heard he got "retired" from the Dos Equis commercial campaign. Best wishes, my friend . . .

They've a Name

With the Dayton Hamvention and many local and regional hamfests coming up, it's time to review the zoology that makes each and every hamfest a unique and interesting experience for buyers and sellers alike!

Venerable Sages - Like spirits on Christmas Eve, these hamfest haunts appear from nowhere, wizened and wrinkled, call sign badge bearing the markings of extreme age. You will be told A Story that you will have never heard before about hams you may have never heard of. Yet it will be fascinating! Some day in the future, when you least expect it, that story will supply a crucial detail, amazing your friends and enemies alike. Learn to listen to the sage!

Disorder Demons - There is a special position down there in the hot place where the guy with the red cape and pointy stick lives for the people who handle your carefully-sorted parts and put them back in the wrong boxes or trays. An unsuspecting buyer gets home and begins work on a project only to find that the ninth part out of ten is mismatched. At next year's hamfest, you get blamed for it.

Benevelonians - Particularly fond of new hams and kids in general, these fine folks take the hamfest role of doting uncles and aunts. No matter how shy the child or unsure the novice, a Benevelonian will always come up with some trinket or extra part to give away or add to the sale. "I've got just the thing for YOU!" they say, eyes twinkling, producing a perfectly chosen gift or gadget for which they won't accept a cent.

Burrowers - As we all know, the best bargains are often on the floor under the tables so a Burrower gets down on hands and knees, no matter how crowded the aisle, proceeding to root through every single box and bag, spreading and sorting the collection, creating chaos and convincing your real customers to cross the aisle to "come back later". They will then offer one-tenth the asking price on a single coil of wire and leave it on the table when you don't sell it to them.

Explainers - An inquisitive buyer inevitably asks the one question about an item to which you don't know the answer. "Will this work with my 1983 Festalon Maglerator?" Unbidden, a hitherto unnoticed Explainer standing nearby will turn and deliver an authoritative and often exhaustive reply to the question, leaving both buyer and seller speechless and astounded. The Explainer will then purchase an obscure item from your table costing less than a dollar and disappear, never to be seen again.

Hamfest Cowbirds - The cowbird lays eggs in the nest of other birds for its chicks to be raised by the hapless parents. Similarly, the hamfest cowbird leaves its junk on your table so you get to dispose of it. While you're engaged with another customer, they put their item on one end of the table and feign great interest in some other doo-dads,

slowly migrating along the table until at the opposite end from their "egg" which they leave behind. You discover the ruse when somebody asks, "How much you want for this?" while holding up the surprise you now own.

Biographers - No matter what you pick up from their table, they know its entire history beginning with the digging of the ore and the smelting of the copper. They know the call signs of every owner (before and after vanity calls) and whether they smoked and what got worked with that particular radio. They always have the manual. The only thing they're not sure of is whether a particular item is actually functional but you've had so much fun learning about it you buy it anyway.

Gravity Testers - I'm sure they spend the morning greasing up their fingers with special non-stick coatings. Once at your table, they'll lift up a fragile item and then..."Oops!" Or they'll hold that power transformer over a flawless radio cabinet and..."Oops!" A variation on this theme is to reach for something in the back or down the table and..."Oops!"...knock over a stack of books or gear. Yes, gravity has been found to be fully operational at your table.

Cats In the Hat - I like these colorful hamfest denizens, usually adorned with bright clothes, patches, enough enameled pins to distort the local magnetic field, friendly and loud and they know your name (or think they do), and have a handshake for everybody! They often leave your table messed up and buyers forget what they were interested in but everybody has a smile on their face afterward. You just have to watch out for Thing One and Thing Two.

And so our hamfest memories are made - of characters old and young, rich and poor, scallywag and Samaritan alike. It wouldn't be the same without the slightly daffy denizens of our tribe, would it? Look at the time, they'll be opening the gates in an hour - happy shopping!

