

the Radio Flyer, *a BRARA Newsletter*

July 2016



BRARA Calendar:

- 09:00-12:00 Wed 29-Jun-16**
Ham Shack Work & Radio Day
- 09:00-12:00 Sat 02-Jul-16**
Ham Shack Work & Radio Day
- Mon 04-Jul-16 Independence Day**
- 19:30 Mon 04-Jul-16**
Informal Net on 145.29 [110.9]
followed by South County NBEMS Net
- 19:00-21:00 Tue 05-Jul-16**
Club Meeting @ West Boca Library
- 09:00-12:00 Wed 06-Jul-16**
Ham Shack Work & Radio Day
- 09:00-12:00 Sat 09-Jul-16**
Ham Shack Work & Radio Day
- 19:30 Mon 11-Jul-16**
Informal Net on 145.29 [110.9]
followed by South County NBEMS Net
- 09:00-12:00 Wed 13-Jul-16**
Ham Shack Work & Radio Day
- 09:00-12:00 Sat 16-Jul-16**
Ham Shack Work & Radio Day
- 19:30 Mon 18-Jul-16**
Informal Net on 145.29 [110.9]
followed by South County NBEMS Net
- 09:00-12:00 Wed 20-Jul-16**
Ham Shack Work & Radio Day
- 09:00-12:00 Sat 23-Jul-16**
Ham Shack Work & Radio Day
- Sun 24-Jul-16 Parent's Day**
- 12:00 Noon Sun 24-Jul-16**
Soft Deadline for Newsletter
- 19:30 Mon 25-Jul-16**
Informal Net on 145.29 [110.9]
followed by South County NBEMS Net
- 09:00-12:00 Wed 27-Jul-16**
Ham Shack Work & Radio Day
- 09:00-13:00 Sat 30-Jul-16**
Ham Shack Work & Radio Day
- 19:30 Mon 01-Aug-16**
Informal Net on 145.29 [110.9]
followed by South County NBEMS Net
- 19:00-21:00 Tue 02-Aug-16**
Club Meeting @ West Boca Library
- 09:00-12:00 Wed 03-Aug-16**
Ham Shack Work & Radio Day
- 09:00-12:00 Sat 06-Aug-16**
Ham Shack Work & Radio Day



This Month's Speaker

This month, there was no Speaker (per se). We did have two short DXpedition videos.

In August, Jeff Cutcher (KB2LDT) will have a presentation on the DV4mini dongle and other SDR add-ons that work with DMR, D-Star, Fusion, APCO25 and other digital modes based on GMSK, 2FSK and 4FSK



Repeater, HSMM, & Ham Shack News

Even though the new shack is operational, there still is a lot of areas for innovation and improvement. We still meet every Wednesday and Saturday morning roughly between 0900 and 1300.

Both Analog repeaters are working. Innovation and improvement opportunities are present here too. Art and Lew are spearheading efforts.

Repeater 2m/70cm linking as well as the time stamp are still works in progress.

While the Digipeater is operational, the packet repeater is a work in progress.

We have secured a limited internet connection at the Shack for spotting -no streaming downloads. We are still working on a internet link from the Repeater.

QSL Report ⁿ⁴ⁱⁱ

As we closed out June, N4BRF had logged in 2,459 QSLs / 8,230 QSOs (29.9%) on LoTW.

DXCC Account Status: New this month: None.

Awards received: Mixed, CW, Phone, 17m, 15m and 10m. Also reached 256 Mixed and 209 CW DXCC

WAS Account Status: New this month: FL 2m Phone, 6m CW; MA 15m CW, 40m Phone; MO 15m CW; NY 15 CW, 40m Phone; OH 15m Phone; VA 15m 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:

- 176 (+1) QSLs from 2012,
- 177 (+0) QSOs from 2013
- 246 (+1) QSOs from 2014
- 268 (+3) QSOs from 2015
- 69 (+69) QSOs from 2016

VUCC Account Status: New this month: 6m EL15, EL87, EM01, EM19, EM69, EM85, EM98, EN61, FN12: 2M EL87, EL98

Update at the next Club Meeting.



ARRL Reaches Agreement with Community Associations Institute on Parity

KB1PA

After two and a half months of intense negotiations, ARRL has reached an agreement with the Community Associations Institute (CAI) <http://www.caionline.org/> the national association of homeowners associations—concerning amended language of the Amateur Radio Parity Act <http://www.arrl.org/amateur-radio-parity-act>. This will allow H.R. 1301 to proceed to what is hoped will be passage of the bill in both houses of Congress this year.

“We express support for H.R. 1301, the Amateur Radio Parity Act, as proposed to be amended,” the CAI statement said.

ARRL working with CAI and Congressional staff, agreed on an amended bill that would allow every amateur living in a deed restricted community the ability to install an **effective outdoor antenna**.

“We are pleased with the agreement with CAI over new proposed language in the legislation, and thank CAI and the Congressional staffers who helped make this happen,” ARRL Hudson Division Director and Legislative Affairs Committee Chairmen Mike Lisenco, N2YBB said. Lisenco stressed that, while the agreement with CAI is significant, there is still much work to be done.

“This agreement with CAI is a big step forward, but getting the Amateur Radio Parity Act signed into law remains a long process. ARRL will still need to call upon the membership to contact their elected officials and ask for their affirmative vote on this bill” he said.

Space Online Today

Here's a startling fact — more than 70 Amateur Radio satellites have been launched over four decades. The number is astonishing because these sophisticated and groundbreaking spacecraft are little known outside the ham radio fraternity. Find out more here:

<http://www.spacetoday.org/Satellites/Hamsats/HamsatsBasics.html>

Amateur Radio and Community Associations

H.R. 1301, as amended, does the following:

- Prohibits community associations from a blanket prohibition of installation of amateur radio antennas.
- Preserves common property by prohibiting Hams from installing an antenna on common property.
- Preserves a community association's authority to adopt and enforce reasonable written rules concerning the installation, placement, and aesthetic impact of external amateur service station antennas.
- Requires notification and prior approval of antenna installations; and prohibits installation of antennas on general common property,
- Directs the FCC to craft a separate preemption policy from the current Commission preemption policy applicable to State and local governments. This separate preemption is a key distinction to the rights and responsibilities of community associations and association residents.

What is Ham Radio?

KE2CJB

Ham Radio is a hobby enjoyed by millions of fans around the world.

It allows people of all ages and backgrounds to communicate directly over radio waves, but you must first pass a test to obtain a license issued by your country. All communications must be personal-not for profit. It is exciting to talk with another Ham radio operator in a country 14,000 miles away directly without using wires or a cell phone, or to engage in a conversation with someone anywhere in the world with similar interests. And, when commercial communications fail, as it sometimes does, ham radio can be effectively used to provide communications for public services such as the police, fire, hospitals, etc.

Final Words on Field Day FD16

KG4FUR

I just wanted to thank everyone who helped set-up, operate, log, and who just participated in FD16.

It was a success! We are all to be congratulated.

More important, we had fun! And, isn't that what this hobby is all about?

I want to especially mention the following brave operators who continued to operate despite the adverse propagation conditions: KM4PBR, W4BFL, AA1EE, WA3ZIC, KJ4QYE, W9IL, KO4XL, KM4MFW, WA8VSJ, N1QFH, W1HT, N4CGC, W3PV, K3SKM, KD4ONT.

Totals are important, but they do not tell the whole story:

Band	Mode	QSOs	Points
3.5	LSB	15	15
7	CW	14	28
7	LSB	156	156
14	CW	215	430
14	USB	151	151
21	CW	128	256
50	CW	1	2
TOTALS		680	1039

Bonus Points: 1050

In FD16 we learned a lot, remembered a lot, and like Jell-O and improvement, there is always room for more. Here are some of the things we need to work on for FD17:

Band Pass Filters: 80, 40, 20, 15, 10 m

Friday Final Set-up: not Saturday

Advance hands-on training and instruction on radios being used as well as the logging software

Use of the radio recording option (CQ N4BRF FD and N4BRF 3E SFL)

Written procedure for radio restart and computer interface when the generator is shut down for refueling

Generator: Grounding, Canopy Cover & Stakes

Safety: Another CO₂ Extinguisher and multiple smoke detectors. Also cones and/or tape to make the generator power cord.

Best Keys for the front gate in Lock-Box to preclude lock-ins.

OK, so we were not perfect, but we all had a lot of fun and next year will be better.

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

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: 145.255 MHz
Wed 19:00 BRARA Red Informativa en Español 442.875
Wed 20:00 PBC-ARES: 147.450 MHz
Thu 19:00 WX4SFL: 444.025/444.850

Scheduled DMR Nets

Day	EDST	Talk Group
Sun	2000	TG-310 (TAC 310)
Mon	1600	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
Wellington	442.3000	7
Lk Worth	444.4500	10
WPB	444.9125	1
PBG	442.1000	10
Jupiter	442.6000	10 Pending

GMRS Repeater Database:

Check out www.myGMRS.com.

Social Media Committee

A committee was formed to update, simplify and modernize BRARA social Media: W4BFL (Jerry), KO4XL (Bruce), N4LS (Nelson), N1QFH (John C)

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),
KO4XL (Bruce), N4CGC (Max),
W3EZB (Marcos), W4BFL (Jerry),
and W4WCD (Walt)

We now hold weekly luncheon meetings at 11:30 Mondays (quorum permitting) at the New BRARA Ham Shack in the West Delray Regional Park located at 10875 West Atlantic Avenue.

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

to a Director at the Shack on
Wednesday or Saturday
morning radio days.

Ft. Pierce ARC Hamfest

Start Date: 08/13/2016
End Date: 08/13/2016
Location: Indian River State College
KSU Building
3209 Virginia Avenue, Ft. Pierce, FL
Website: <http://fparc.org/>
Sponsor: Ft. Pierce Amateur Radio
Club
Type: ARRL Hamfest
Talk-In: 147.345
Public Contact: Joe Lenartiene
3209 Virginia Ave, Bldg Q, Ft. Pierce,
FL 34981
Phone: 772-462-7815
Email: jlenarti@irsc.edu

FL State Convention— Melbourne Hamfest

Start Date: 10/10/2014
End Date: 10/11/2014
Location: Melbourne Auditorium
625 East Hibicus Blvd.
Melbourne, FL 32901
Website: <http://www.pcars.org>
Sponsor: Platinum Coast Amateur
Radio Society
Type: ARRL Convention
Talk-In: 146.250/146.850 (No PL
tone)
Public Contact: Don Winn , AF4Z
PO Box 1004 Melbourne, FL 32902
Phone: 321-254-9495
Email: hamfest2014@cfl.rr.com

Free Laurel VEC Testing



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

Thu 11-Aug-2016, 1900-2100,
Rutherford Com Ctr, 2000 Yamato
Rd, Boca Raton, FL 33498 [BRARA]
(Quarterly: Feb, May, Aug, Nov)

Sun 04-Sep-2016, 1100-1300, Fire
Station 28, 1040 RPB Blvd, Royal
Palm Beach [PWARC] (1st Sunday of
odd months).

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).

“A world without radio is a
deaf world.

A world without television is a
blind world.

A world without telephone is a
dumb world.

A world without
communication is indeed a
crippled world.”

— Ernest Agyemang Yeboah

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 *theRF*
as much as we did publishing it!

Welcome New Members:

K1TQ
K3SUH

Sharon Cohen [E]
Robert Kares

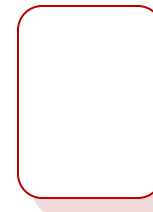
For more on BRARA
www.n4brf.org

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.



the Radio Flyer

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



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



FCC Tech Advisory Council Initiates Noise Floor Inquiry

Radio amateurs frequently complain about increasing noise from a variety of sources, so it should be welcome news that the FCC Technological Advisory Council (TAC) – an advisory group to the FCC – is investigating changes and trends to the radio spectrum noise floor to determine if there is an increasing noise problem, and, if so, its extent. The FCC Office of Engineering and Technology (OET) announced the TAC study this week in a *Public Notice* and invited comments and answers to questions that the TAC has posed in the notice. The comment deadline is August 11. The TAC said it is trying to determine the scope of any noise issues and has invited “quantitative evidence” of noise problems, as well as recommendations on how to perform a noise study.

“The TAC is requesting input to help answer questions about the study of changes to the spectrum noise floor over the past 20 years,” the announcement said. “Noise in this context denotes unwanted radio frequency (RF) energy from manmade sources. Like many spectrum users, TAC members expect that the noise floor in the radio spectrum is rising as the number of devices in use that emit radio energy grows.”

The ARRL representative on the TAC, Greg Lapin, N9GL, co-chairs the TAC Spectrum and Receiver Performance Working Group with Lynn Claudy of the National Association of Broadcasters. Lapin also serves as chairman of the ARRL RF Safety Committee.

The TAC said that its search for “concrete evidence of increased noise floors” has turned up only “limited

available quantitative data” to support its presumption of a rising noise floor. The TAC said it wants to find ways to add to the available data so it can “answer important questions” on the topic for the FCC.

The TAC noted that many types of devices generate radio spectrum noise. In the case of *incidental radiators* – devices not designed to emit RF but do so anyway – there is little regulation governing such noise. “Most electric motors, light dimmers, switching power supplies, utility transformers, and power lines are included in this category,” the TAC announcement explained.

Devices designed to generate RF for internal use, or send RF signals to associated equipment via connected wiring, but which are not intended to emit RF energy, are called *unintentional radiators*. This category includes computers and many portable electronic devices, as well as many new high-efficiency lamps. FCC regulations limit the levels of emitted RF energy from these devices.

A third group of devices categorized as *intentional radiators* (unlicensed and licensed) and *industrial, scientific, and medical (ISM) radiators* – are designed to generate and emit RF energy by radiation or induction. Intentional radiators include cellular phones and base stations, unlicensed wireless routers, Bluetooth devices, broadcast TV and radio stations, and radar systems. Amateur Radio transmitters also fall into this category. Microwave ovens, arc welders, and fluorescent lighting are examples of ISM equipment.

“Such emitters contribute to the noise floor with emissions outside of their assigned frequencies,” the TAC said. “These are sometimes generated as spurious emissions, including, but not limited to, harmonics of desired frequencies and intermodulation

products.” FCC regulations permitting the operation of these devices specify emission limits outside of the device’s licensed or permitted operating frequencies.

The TAC said that responses to the questions it has posed in the *Public Notice* will help it to “identify aspects of a study to determine trends in the radio spectrum noise floor.” The *Public Notice* includes information on all methods of responding to the inquiry. The ARRL is planning to comment.

For more information, contact Greg Lapin, N9GL.

To All Our Florida ARRL Members

I am writing to you today because we are at a critical juncture in our efforts to obtain passage of the Amateur Radio Parity Act in the U.S. Senate (S.1685)

Senator Bill Nelson (D-FL) is not yet supporting the legislation despite the recent agreement between ARRL and the Community Associations Institute (CAI). This agreement is supported by all parties to the issue and leaves no visible opposition to the bill. However, Senator Nelson’s support is critical to the success of our efforts.

You are one of well over 40,000 licensed Amateur Radio Operators living in Florida. Many of you already live in deed-restricted communities, and that number grows daily.

If you would like to have the opportunity to have an effective outdoor antenna but are not currently allowed to do so, or you already have outdoor antennas and want to support your fellow hams, then we need you to reach out to Senator Nelson TODAY! Right away.

Please go to this website and follow the prompts. The link will provide you with a letter that you can send to Senator Nelson.

<http://arrrl.rallycongress.net/ctas/contact-senator-nelson-regarding-amateur-radio-parity-act>

Thank you.

73,
Rick

Rick Roderick, K5UR
President
ARRL-The national association for Amateur Radio

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



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



Ham Humor

I'm EXTRA Ignorant

By Dan Romanchik, KB6NU

On Sunday, I received the following e-mail from a reader:

"Just wanted to let you know I passed the General exam using your study guide. It was very helpful. I am now generally ignorant whereas before I was only technically ignorant. Ha!"

My reply to him was:

"Well, if you're generally ignorant, I guess that makes me EXTRA ignorant!" This isn't just a joke--being ignorant is part of the hobby. Amateur radio operators will always be ignorant about something or other. Even if you could master every facet of the hobby at some point in time, your mastery would be short-lived as the technology continued to advance.

Over the course of my amateur radio career, we've gone from equipment that primarily used vacuum tubes, to solid-state gear that first used discrete transistors and then integrated circuits, to software-defined radios. I could have, at some point, simply given up on the new technology and still enjoyed amateur radio. Some guys do that, and that's OK. It is only a hobby after all.

I'm not one of those guys, though, and if you're not one of those guys, then you have to resign yourself to being ignorant. But, that's a good thing, as long as you realize that you're ignorant. Realizing that you're ignorant will spur you on to learn new things and accept new challenges.

Recently, I realized that I'm mostly ignorant about satellite operation. I know some of the basics from having read articles and writing about the topic in my study guides, but I have never made a contact using a satellite. I think that might be one of my next challenges. With the advent of CubeSat, there are many new satellites up in the air and many more opportunities to have interesting contacts.

So, what are you ignorant about? By that I mean, of course, what's going to be your next challenge in amateur radio?

"When radio keeps silent, our ears shall never hear the real details!" – Ernest Agyemang Yeboah

Hobby Lobby CEO Issued Embarrassing Callsign

WASHINGTON, D.C. - After months of studying, practice exams and searching for the right frame for his long-anticipated license, Hobby Lobby CEO Derrick Brown has been issued a FCC amateur radio service callsign.

Brown passed the amateur radio "General Class" exam Monday at an Oklahoma City club meeting, the same day the Supreme Court issued a ruling in support of his retail chain's desire to not cover certain contraceptives in its insurance plan.

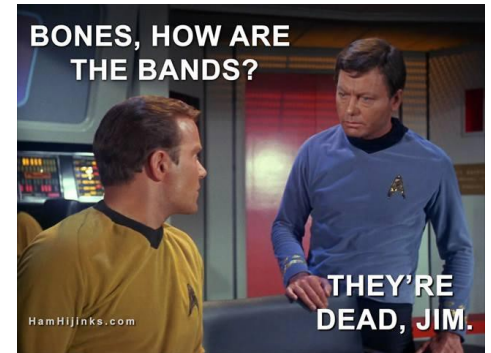
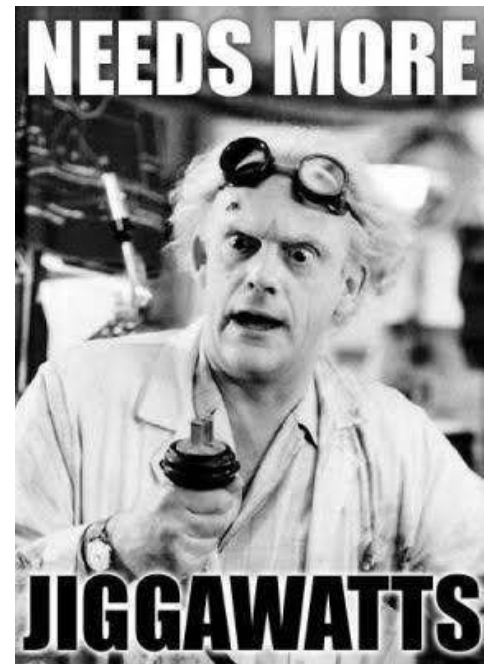
Emerging from the VE test session immediately after learning of the court decision, a defiant Brown said, "Not only does the SCOTUS support our position, so does the FCC. And to be clear, that's the missionary position."

The CEO says despite his accomplishment, he's disappointed in his callsign. "I was hoping for something more 'crafty,'" says Brown.

He will join the amateur radio ranks with the call sign: NOØPIL.

FCC spokesman Robert Thorndyke declined comment, except to say, "We think Hobby Lobby is an excellent place to purchase frames for contest certificates."

Brown says he plans to do most of his radio operating on Sundays, his only day off. You can work him at 1800 UTC Sundays when he checks into the Macreme Makers Net on 14.242 MHz SSB.



TALARC Monthly Nets

EchoLink, 20-Meter, and IRLP Nets meet the 2nd Saturday of each month.

40-Meter Net meets the 3rd Sunday of each month.

D-Star Nets meet the 1st and 3rd Mondays of each month.

Note: Access to the *FMCA-ARC* EchoLink Conference Node cannot be made via a Repeater.

Mode	Day	Date	Time [Zulu]	Band	Where to find the Net
EchoLink	Saturday	June 11	12 Noon ET [1600Z]		*FMCA-ARC* Conference
HF	Saturday	June 11	1:00 PM ET [1700Z]	20 meters	14.275 MHz [+/- 5 KHz]
IRLP	Saturday	June 11	2:00 PM ET [1800Z]	2 meters	Node 9735 [K9DC-Indy]
HF	Sunday	June 19	6:00 PM ET [2200Z]	40 meters	7.243 MHz [+/- 5 KHz]
D-Star	Monday	June 20	9:00 PM ET [0100Z]		REF 026A
D-Star	Monday	July 4	9:00 PM ET [0100Z]		REF 026A

FREE FCC TECHNICIAN AND GENERAL LICENSE CLASSES

BRARA CLUB STATION
10875 W Atlantic Ave
Delray Beach, FL

Tech class: 7/9/16 1pm-5pm
7/10/16 9am-5pm
Gen class: 7/16/16 1pm-5pm
7/17/16 9am-5pm
Tech review: 7/23/16 1pm-5pm
Gen review: 7/24/16 1pm-5pm

Testing will take place on
Thursday, August 11, 2016 at:
Community Center
Patch Reef Park
2000 Yamato Road
Boca Raton, FL

To register for a class, please
send e-mail to:

TRAINING@N4BRF.ORG

Please remember to include your
full name, phone number, e-mail
address and which course(s) are
needed.

We use training materials by
Gordon West. Text books may
be purchased in advance by
sending payment to:

Boca Raton Amateur Radio Assn
P.O. Box 480162
Delray Beach, FL 33448-0162

Technician - \$22.00
General - \$25.00

You may also place prepaid book
orders using the drop-box that
has been provided at the club
station.



During the month of July, the Boca Raton Amateur Radio Association will offer classes for both the Technician and General Amateur Radio licenses at its newly-expanded, air-conditioned club station in West Delray Regional Park.

Each class will consist of 12 hours of training and a 4 hour review session. FCC testing will then take place at our regularly-scheduled testing session on August 11th in Patch Reef Park. Please see the sidebar (left) for complete details.

The course and testing are free but all participants are strongly advised to purchase the appropriate text book:

Technician: "Technician Class 2014-18" by Gordon West

General: "General Class 2015-2019" by Gordon West

(Please see sidebar for ordering information.)

Due to limited space, **advance registration for each course is required**. Please send e-mail to TRAINING@N4BRF.ORG to reserve your place. Be sure to provide your complete name, phone number, e-mail address and which course(s) you are registering for.

The Boca Raton Amateur Radio Association, a 501c(3) not-for-profit corporation, is an ARRL-designated Special Service Club. We would be happy to welcome you as a new member. Please speak with any of our board members if you are interested.

OUR WEBSITE: <http://www.brara.org>