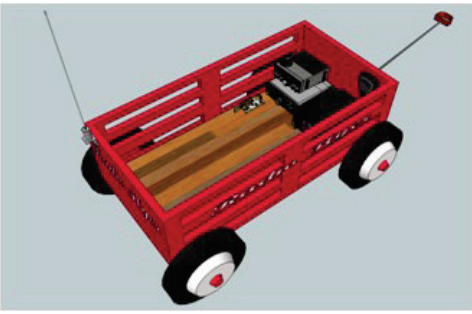


the Radio Flyer, a BRARA Newsletter

June 2017



BRARA Calendar:

09:00-13:00 Sat 03-Jun-17

Ham Shack Work & Radio Day

20:00-21:00 Sun 04Jun17 (443.300)

DMR-FL-LO Tech Net [TS2 TG2]

19:00 Mon 05-Jun-17 (145.29 [110.9])

Monday Night Nets

Tue 06-Jun-17 D-Day

19:00-21:00 Wed 06-Jun-17

Club Meeting @ West Boca Library

09:00-12:00 Wed 07-Jun-17

Ham Shack Work & Radio Day

09:00-13:00 Sat 10-Jun-17

Ham Shack Work & Radio Day

20:00-21:00 Sun 11-Jun-17 (443.300)

DMR-FL-LO Tech Net [TS2 TG2]

19:00 Mon 12-Jun-17 (145.29 [110.9])

Monday Night Nets

Wed 14-Jun-17 Flag Day/U.S.Army

B'day

09:00-12:00 Wed 14-Jun-17

Ham Shack Work & Radio Day

09:00-12:00 Sat 17-Jun-17

Ham Shack Work & Radio Day

Sun 18-Jun-2017 Father's Day

20:00-21:00 Sun 18-Jun-17 (443.300)

DMR-FL-LO Tech Net [TS2 TG2]

19:00 Mon 19-Jun-17 (145.29 [110.9])

Monday Night Nets

Wed 21-Jun-2017 Summer Solstice

09:00-12:00 Wed 21-Jun-17

Ham Shack Work & Radio Day

18:00 UTC Sat 24-Jun-17 through

20:59 UTC Sun 25-Jun-17 Field Day

12:00 Noon Sun 25-Jun-17

Deadline for Newsletter Input

20:00-21:00 Sun 25Jun17 (443.300)

DMR-FL-LO Tech Net [TS2 TG2]

19:00 Mon 26-Jun-17 (145.29 [110.9])

Monday Night Nets

09:00-12:00 Wed 28-Jun-17

Ham Shack Work & Radio Day



This Month's Speaker

This month (6-Jun), we will go over final preparations for FD-2017.

Next month (11-Jul), Steve Iker (KS3K) will present on CW Contesting for Non-CW Operators. Steve's Bio-Sketch is on page 7.

Possible future speakers include:

- Ryan Krenzischek (W4NTR): Army MARS
- Ed Callaway (N4II): TBD



Repeater, HSMM, & Ham Shack News

Even though the new Shack is operational, there are still a lot of areas for innovation and improvement. We still meet every Wednesday and Saturday morning roughly between 09:00 and 13:00.

Both analog repeaters are working. Innovation and improvement opportunities are present here too. The work on the new 2m antenna and connections are completed

Repeater 2m/70cm linking as well as the time stamp are still works in progress. We are still fund collecting for a new 2m repeater antenna.

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

We have still not solved the limited internet connection and are still dependent on individual hot spots. We are, however, getting closer to resolving the internet link from the Repeater.

QSL Report ⁿ⁴ⁱⁱ

As we closed out the Month, N4BRF has logged in 2,784 QSLs 8,563 QSOs (32.5%) on LoTW.

DXCC Account Status: New this month Czech Republic (OK). Awards received: Mixed, CW, Phone, 20m, 17m, 15m and 10m. We are now 265 Mixed DXCC.

WAS Account Status: New this month: MA, 6m Digital (JT65). Awards issued: Mixed, 20m, CW, Phone, Digital, Triple Play, RTTY. Nothing new this month: DE-40m CW. We still need:

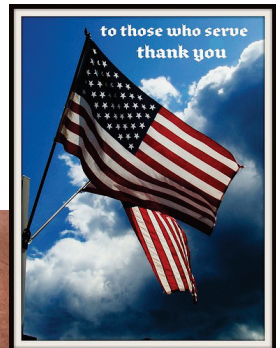
- AK, ID for 40m
- WV for 15m
- WY for 20m Phone
- NV for 20m CW.
- AK, ID, ME, NV for 40m CW.

We have received the following QSOs from Field Day activities:

- 176 (+0) QSLs from 2012,
- 184 (+0) QSOs from 2013
- 258 (+0) QSOs from 2014
- 281 (+1) QSOs from 2015
- 155 (+0) QSOs from 2016

VUCC Account Status: Nothing new this month.

Update at the next Club Meeting.



father
child
patience
trust
time
love
pride
joy



Happy
father's day

What to Expect - FD2017

- Few F2 openings (if any) on 15m, 10m and 6m. If anything, north-south paths to Canada and the Caribbean
- Keep an eye out for sporadic E on 15m, 10m and 6m (late morning and early evening)
- 20m, 40m and 80m should provide the bulk of QSOs
- 160m should produce QSOs if QRN from thunderstorms isn't overwhelming.

Where to Point our Antennas - FD2017 ^{w4ü}

I did this analysis for the N4BRF site. The distances don't seem to line up with the known population centers (what's source of the big spike at 293 degrees that is less than 3500 km away?), but the angles seem correct.

Conclusion:

On Saturday -

Aim the 20 & 15m antennas to 300 degrees and leave them there until the bands close, to work the yellow and green spikes (LA, SFO, and Seattle). Exceptions would be for any of the Canadian sections - MAR, NL, ONE, ONN, ONS, GTA, etc. - or NE, ND, and SD. If any of these are spotted, turn the beam and work them immediately! I note that HI is 282 degrees and AK 327 degrees, so they, too, should be workable without difficulty if the antennas are at 300 degrees. (The peak chance for KL7 should be on 20m at 0100-0300z, i.e., just as the band closes, so don't give up too soon.) VI and PR may be spotted on the higher bands during the first few hours of the event; note that their beam heading (120 degrees) is the reverse of 300 degrees, so they can be quickly worked by using the 180-degree reverse feature of the SteppIR without using the rotator.

Aim 40m generally north. We will have SS before almost all of the East Coast (0017z, 8:17 PM; see attached map), but the terminator is almost parallel to the coast, so 80m will come alive very quickly as nearly all of the East Coast gets SS simultaneously. Beginning about an hour before our SS (i.e., about 7:17 PM), we should start looking for spots of VI and PR, to try to get those multipliers before they become audible to the rest of the East Coast (and before the guys in VI and PR turn in for the night).

SS in the LA basis

SS in the LA basin (the yellow spike) will be around 0317z and SS in Seattle will be around 0417z, so we should start hearing them on 40m around 90 minutes earlier, or 0147z and 0247z, respectively. They should appear on 80m about an hour after we hear them on 40m. The biggest question is when to turn the 40m antenna at night: The hours before 0500z will be hours of maximum activity on the East Coast (don't forget the Central Time Zone), so the trade of possibly-lower QSO rate for rare western multipliers will have to be an operator's game-time decision. If we have the stations networked appropriately, the 40m overnight op should know which western multipliers are still needed after the 20 and 15m operation earlier that day, and can make his decision accordingly: Perhaps the best strategy is to stay north until the rate drops, or until the majority of the callers seem to be from west of the Mississippi, then move the antenna to 300 degrees. Note that KH6 SS will be 0510z.

In my experience there is a slow time from 0700yet. Often all the stations audible on 40m have been worked by this time. (One exception is KL7; their SS is 0745z so they often appear on 40m around this time.) During this hour, a band change should be made to 80m or, if 80m has been manned during the night, 160m. Use this hour to work stations on new, lower bands, but keep an eye on 40m for activity pick-up with the new day, as the switch back to 40 can be critical: The SR terminator is in the SE-NW direction in June (see the Sunrise map, attached); SR in Maine will be 0845z, but our SR will be 1029z (the same time as the MN-ND-Canadian border point), meaning that we will have only a brief opening to the NE and Midwest population centers between the time they wake up and their SR, let alone our SR. I suggest aiming the 40m antenna to the north when returning to 40m (around 0800z) to catch stations getting on the band at their SR or before; activity to the west will still be low at this time. Note that SR in VI and PR is about 0945z, so that is likely to be the last opportunity one has to work them on the low bands; if one of those sections is still needed, a quick turn of the 40m antenna may be in order, but let's hope they've been worked by this time. Another exception would be if KL7 is still needed; the hour before our SR will be the period of maximum darkness in Anchorage and the best chance to work it on the low bands.

On Sunday -

Aim the 20 & 15m antennas north at SR (1029z), to the NE and Midwest population centers that have had sun much longer than we have. 20m should open within 30 minutes of SR but, if nothing is heard to the north, aim to the Caribbean (120-150 degrees) to get any VI, PR, or DX active, as that should be the first path to open. (DX is good to work on Field Day; its section is "DX".) Unless the rate is amazingly good, return to the north as soon as possible, stopping at 45 degrees (briefly) to check for any EU DX available. Seattle SR will be before 1230z, so at 1230z aim the high band antennas to 300 degrees, and keep them there for the duration of the event. (CA is completely in sun by 1250z.) If still needed, KL7 should be audible around 1400-1500z, while KH6 should be audible from 1300-1800z. (KL7 should be the more difficult section to hear, so should get the higher priority when it is spotted.)

Aim the 40m antenna to 300 degrees at SR (1029z), to catch the last of the Texas and West Coast stations, then after they fade, aim north (around 1200z) for the duration of the event.

If we have separate 15 and 20 antennas, it would help during the day to have one of them pointed north at least part of the time, to scoop some of those hard-to-get Canadian sections and under-represented US sections like NNY and WNY. The other, however, should be at 300 degrees, picking off KL7, the nine CA sections, EWA, etc. Note that the hardest-to-get conterminal US sections, NE, ND, and SD, are on almost the same heading as AK, i.e., 325 degrees.

Anyway, that's what I think.

Ed N4II



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	20:00	IRLP Tech	147.075 MHz
Fri	09:00	SARNet:	
		PBC	443.975 MHz
		FTL	442.850 MHz

Scheduled DMR Nets

Day	EDST	Talk Group	
Sun	2000	TG-2	(LO) FL Tech
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	442.2250	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 In Repair
WPB	444.9125	1
PBG	442.1000	10
Jupiter	442.6000	10 Pending
Stuart	440.7000	1
Naples	444.9850	1
Marco Island	444.8125	1

Social Media Committee

A committee was formed to update, simplify and modernize BRARA social media: W4BFL (Jerry), KO4XL (Bruce), NE4LS (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 BRARA Board of Directors:

K4LEW (Lew), KG4FUR (Gerry),
KO4XL (Bruce), WA8VSJ (Art),
KE4OBV (Patrick), W4BFL (Jerry),
and W4WCD (Walt)

will hold scheduled monthly meetings at 11:00 at the shack on the Saturday preceding the next General Meeting. Additional impromptu meetings may be held at the Shack on Wednesday and Saturday mornings.

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 cotton/poly shirt (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

DMR MARS CERT

Award Chasing Ragchewing

Building & Experimenting Satellite

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.

Amateur License Refresher

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

Extra Pool

E6A06

What is the beta of a bipolar junction transistor?

- A. The frequency at which the current gain is reduced to 1
- B. The change in collector current with respect to base current
- C. The breakdown voltage of the base to collector junction
- D. The switching speed of the transistor

E6A13

What do the initials CMOS stand for?

- A. Common Mode Oscillating System
- B. Complementary Mica-Oxide Silicon
- C. Complementary Metal-Oxide Semiconductor
- D. Common Mode Organic Silicon

General Pool

G9A04

What is the reason for the occurrence of reflected power at the point where a feed line connects to an antenna?

- A. Operating an antenna at its resonant frequency
- B. Using more transmitter power than the antenna can handle
- C. A difference between feed-line impedance and antenna feed-point impedance
- D. Feeding the antenna with unbalanced feed line

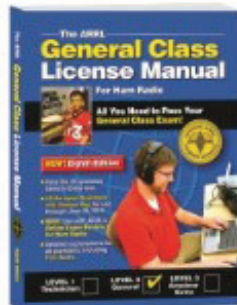
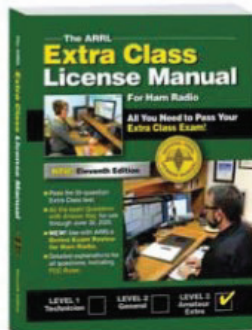
G9A13

What would be the SWR if you feed an antenna that has a 300-ohm feed-point impedance with 50-ohm coaxial cable?

- A. 1.5:1
- B. 3:1
- C. 6:1
- D. You cannot determine SWR from impedance values

Answers to License Refresher:

- E6A06 (B)
- E6A13 (C)
- G9A04 (C)



New Hams Corner WA2NSW

Emergency Communication

One of the requirements of our hobby is you are ready to provide emergency communications (EmComs) when regular links fail. For some of us this is the keystone and for others it is just something they hope never happens. Every time you participate in a net you are getting ready for an emergency operation. You should be prepared to send simple messages in a designated format in a short period of time. Participating in contests will help you do this in an organized fashion.

The fourth weekend in June is the annual preparedness weekend for hams. Field day is a 24 hour operation, preferably using emergency power, to see how many contacts you can make. There are different classes of operation determined by what power source you use, number of transmitters used and power level transmitted. No you don't have to do all 24 hours but that is the fun of it. When you have multiple operators it is easier to do shifts so there is always someone on the radio.

The most rewarding thing anyone can do is to help out another human. If you get a call to help and you connect to an emergency service to relay the message you can save a life! Floods, fires, car accidents and weather related issues all are part of what hams have been helping report for years! There are many ways to relay information on an emergency. If normal communications still exist you may take a message from someone who does not have access to them. You will become the relay and repeat the information received in the exact words (or as close as possible).

When other communications fail hams are called upon to fill in the gap. You might be assigned to work alongside an emergency service person. You will be their connection to their dispatch point. The idle chatter ceases, comments are kept in check and documentation becomes the norm. Every message should be logged in some format so it can be referred back to in the future. The simplest form of this is plain paper and writing down the gist of the conversation along with time and the station to whom delivered.

If you use tactical call signs they should be recorded along with the FCC issued call.

Always be ready because you never know when an emergency will happen!

73

Newsletter Guidelines kg4fur

Thanks for all who submitted articles and I hope you continue to do so. We're also looking for new writers as well. Here are some guidelines for article submissions.

- Text should be in MS Word or equivalent, saved as a .DOC file. ASCII text written in an email works too.
- Write your best stuff, but don't sweat the grammar. That's why there's an editor.
- Please submit pictures/illustrations as separate files, don't embed them in the text.
- Be sure to submit clear, in-focus photos

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@yahoo.com





Ham Humor

Confused Hams Show Up To Hara

By K5PO, On the scene

DAYTON, OHIO — The Dayton Hamvention has moved on to bigger and better things in the Greene County Expo Center, but some hams aren't ready to quit old Hara Arena just yet.

Hara Arena, which has hosted Hamvention since seemingly the dawn of time, had grown ratty and fell into disrepair. The Dayton Amateur Radio Association finally made the bold but necessary move to a newer, better location, but some hams seem to be stuck in old habits.

"I showed up at 4:30 a.m. here at Hara just like I do every year," said ham operator Boyd Flauderson, 78, from the Hara parking lot. "You gotta get here early to get in line for the scooters," he shared.

"The Hara flea market is a little smaller than last year," noted Rodrick Arent, 93, who had just arrived on a red-eye flight from his home country of Scotland.

When informed that Hamvention was no longer at Hara, the steadfast attendees seemed skeptical.

"I've already sold two of these Hammerlund amps this morning. I've never heard of the Greene County Expo Center. I'm staying right here at Hara," remarked an unshaken parking lot vendor. "Hamvention not at Hara... ha! Next you're going to tell me that the FCC is going to drop the Morse requirement-not going to happen, pal!"

"I'm not sure where the food vendors are this year," questioned entrepreneurial ham Larry Smalls. "But I've started selling Bud Light for \$10 a piece from the cooler in my mobile."

Dayton Police were called to Hara to address the apparent trespassers, but Dayton Officer Mike Lowry ended up chatting with a VE that had set up a pop-up test session. The officer decided to sit for his Technician's exam.

As of press time the event was going strong at Hara, seemingly without most hams noticing any change.

HamHijinks.com



New Event Brings Hams Together

By K5KVN, on the scene

RACINE, WASHINGTON — A local ham radio group is pioneering a new way to bring ham radio operators together and clean up the airwaves at the same time.

The Northwest Operators In Several Events club (NOISE) will host "QRming In The Park" this Saturday at the downtown dog park.

"The whole concept came about as a way to let some of these LIDS release their frustrations in a safe setting, all at the same time - and most importantly - on the same frequency," said NOISE president Zeke Anderson. "Let's give them this one chance to get it all out, then they won't QRM at random times," he added.

Amateur radio operator Myron Goldman says he likes the idea. "The barking dogs in the background will be a really nice touch," he said. Suggested items to bring to the event include:

- Transmitter (preferably misaligned as to encourage splatter)
- Antenna with high SWR
- Straight key that can accommodate a brick set upon the key
- Sound effects app on your phone
- A referee's whistle or other noise-making device
- A dish suitable for potluck lunch

HamHijinks.com



WWW.ARRL.ORG

18:00 UTC Sat-20:59 Sun
24-25 June 2017

Again, this year we will be operating from the shack as a 3E Home Station using emergency power.

There are no substantive rule changes from 2016. There are some minor changes on VHF/UHF Information.

For specifics, please consult the above ARRL website.

We still get Bonus Points for:

1. Emergency Pwr-100 points per Transmitter
2. Media-100 points for attempting to secure Local Media publicity
3. Pub Loco-No points
4. Pub Info-No points
5. SM/SEC Messages-100 points
6. Messages Originated-100 points
7. Satellite QSO-No points
8. Alt Pwr-5 QSOs = 100 points
9. W1AW FD Bulletin-100 points
10. Edu Activity-100 points
11. Elected Official Visit-100 points
12. Site Visit: ARC/SA/EM-100 points
13. GOTA-No points
14. Web Submission-50 points
15. Youth-10 points per QSO
16. Social Media-100 points for FD promo
17. Safety Officer-No points

We need to insure that we maximize the other bonus point options like Social Media.

Join us on Twitter [BRARA@N4BRF](#) and on Instagram [#BRARA_N4BRF](#) as well as on Facebook.

New this year, are the 40m and 20m band pass filters donated by WA8VSJ and KG4FUR respectively. We may want an 80 m band pass filter too.

Contest and Special Event Operating News and Information

Data below as well as more information courtesy of the following website:
<http://www.hornucopia.com/contestcal/index.html>.

Contest and Special Event	Date Time Group
+ Phone Fray	0230Z-0300Z, May 31
+ CWops Mini-CWT Test	1300Z-1400Z, May 31 and 1900Z-2000Z, May 31 and 0300Z-0400Z, Jun 1
+ NRAU 10m Activity Contest	1700Z-1800Z, Jun 1 (CW) and 1800Z-1900Z, Jun 1 (SSB) and 1900Z-2000Z, Jun 1 (FM) and 2000Z-2100Z, Jun 1 (Dig)
+ NCCC RTTY Sprint	0145Z-0215Z, Jun 2
+ NCCC Sprint	0230Z-0300Z, Jun 2
+ 10-10 Int. Open Season PSK Contest	0000Z, Jun 3 to 2400Z, Jun 4
+ PVRC Reunion	0000Z-0400Z, Jun 3 (CW) and 0000Z-0400Z, Jun 4 (SSB)
+ DigiFest	0400Z-1200Z, Jun 3 and 2000Z, Jun 3 to 0400Z, Jun 4 and 1200Z-2000Z, Jun 4
+ Wake-Up! QRP Sprint	0600Z-0629Z, Jun 3 and 0630Z-0659Z, Jun 3 and 0700Z-0729Z, Jun 3 and 0730Z-0800Z, Jun 3
+ SEANET Contest	1200Z, Jun 3 to 1200Z, Jun 4
+ UKSMG Summer Contest	1300Z, Jun 3 to 1300Z, Jun 4
+ IARU Region 1 Field Day, CW	1500Z, Jun 3 to 1459Z, Jun 4
+ RSGB National Field Day	1500Z, Jun 3 to 1500Z, Jun 4
+ Dutch Kingdom Contest	1500Z, Jun 3 to 1500Z, Jun 4
+ Alabama QSO Party	1600Z, Jun 3 to 0400Z, Jun 4
+ RSGB 80m Club Championship, Data	1900Z-2030Z, Jun 5
+ ARS Spartan Sprint	0100Z-0300Z, Jun 6
+ Phone Fray	0230Z-0300Z, Jun 7
+ CWops Mini-CWT Test	1300Z-1400Z, Jun 7 and 1900Z-2000Z, Jun 7 and 0300Z-0400Z, Jun 8
+ NCCC RTTY Sprint	0145Z-0215Z, Jun 9
+ NCCC Sprint	0230Z-0300Z, Jun 9
+ HA3NS Sprint Memorial Contest	1900Z-1929Z, Jun 9 (40m) and 1930Z-1959Z, Jun 9 (80m)
+ DRCG WW RTTY Contest	0000Z-0759Z, Jun 10 and 1600Z-2359Z, Jun 10 and 0800Z-1559Z, Jun 11
+ VK Shires Contest	0600Z, Jun 10 to 0600Z, Jun 11
+ Asia-Pacific Sprint, SSB	1100Z-1300Z, Jun 10
+ Portugal Day Contest	1200Z, Jun 10 to 1200Z, Jun 11
+ SKCC Weekend Sprintathon	1200Z, Jun 10 to 2400Z, Jun 11
+ GACW WWSA CW DX Contest	1500Z, Jun 10 to 1500Z, Jun 11

Da Pres says:

Next Meeting:

Tuesday
06-Jun-2017
19:00-20:45
West Boca Library

Our next major event is FD17 on the weekend of 24/25 June. Our efforts should be focused on this event and the work at hand to make it a memorable fun event for all

We are always looking for a few good HAMS to man the stations either on the air or as loggers. Who am I kidding, we aren't proud, we will take any licensed HAM. But CW operators are a premium.

John Cole has been instrumental in taking on straightening up the shack and our recycling efforts.

We must now train our attention on getting ready for the actual event: testing equipment to be used at the 3 stations, ensuring that all operators are trained on the operational equipment and setting up for the big event.

My father hated radio and could not wait for television to be invented so he could hate that too.

Peter DeVries

If it weren't for Philo T. Farnsworth, inventor of television, we'd still be eating frozen radio dinners.

Johnny Carson

+ Asia-Pacific Sprint, SSB	1100Z-1300Z, Jun 10
+ Portugal Day Contest	1200Z, Jun 10 to 1200Z, Jun 11
+ SKCC Weekend Sprintathon	1200Z, Jun 10 to 2400Z, Jun 11
+ GACW WWSA CW DX Contest	1500Z, Jun 10 to 1500Z, Jun 11
+ REF DDFM 6m Contest	1600Z, Jun 10 to 1600Z, Jun 11
+ ARRL June VHF Contest	1800Z, Jun 10 to 0259Z, Jun 12
+ Cookie Crumble QRP Contest	1700Z-2200Z, Jun 11 0000Z-0200Z, Jun 12
+ NAQCC CW Sprint	0030Z-0230Z, Jun 14
+ Phone Fray	0230Z-0300Z, Jun 14
+ CWops Mini-CWT Test	1300Z-1400Z, Jun 14 and 1900Z-2000Z, Jun 14 and 0300Z-0400Z, Jun 15
+ RSGB 80m Club Championship, CW	1900Z-2030Z, Jun 14
+ NCCC RTTY Sprint	0145Z-0215Z, Jun 16
+ NCCC Sprint	0230Z-0300Z, Jun 16
+ SMIRK Contest	0000Z, Jun 17 to 2400Z, Jun 18
+ All Asian DX Contest, CW	0000Z, Jun 17 to 2400Z, Jun 18
+ ARR BPSK63 Contest	1200Z, Jun 17 to 1200Z, Jun 18
+ Ukrainian DX Classic RTTY Contest	1200Z, Jun 17 to 1159Z, Jun 18
+ IARU Region 1 50 MHz Contest	1400Z, Jun 17 to 1400Z, Jun 18
+ AGCW VHF/UHF Contest	1400Z-1700Z, Jun 17 (144) and 1700Z-1800Z, Jun 17 (432)
+ Stew Perry Topband Challenge	1500Z, Jun 17 to 1500Z, Jun 18
+ West Virginia QSO Party	1600Z, Jun 17 to 0200Z, Jun 18
+ Feld Hell Sprint	1800Z-1959Z, Jun 17
+ WAB 50 MHz Phone	0900Z-1500Z, Jun 18
+ Kid's Day Contest	1800Z-2359Z, Jun 18
+ Run for the Bacon QRP Contest	0100Z-0300Z, Jun 19
+ Phone Fray	0230Z-0300Z, Jun 21
+ CWops Mini-CWT Test	1300Z-1400Z, Jun 21 and 1900Z-2000Z, Jun 21 and 0300Z-0400Z, Jun 22
+ NAQCC CW Sprint	0030Z-0230Z, Jun 22
+ RSGB 80m Club Championship, SSB	1900Z-2030Z, Jun 22
+ NCCC RTTY Sprint	0145Z-0215Z, Jun 23
+ NCCC Sprint	0230Z-0300Z, Jun 23
+ Battle of Carabobo International Contest	0000Z, Jun 24 to 2400Z, Jun 25
+ UFT QRP Contest	0600Z-0900Z, Jun 24 and 1400Z-1700Z, Jun 24
+ Ukrainian DX DIGI Contest	1200Z, Jun 24 to 1200Z, Jun 25
+ His Maj. King of Spain Contest, SSB	1200Z, Jun 24 to 1200Z, Jun 25
+ ARRL Field Day	1800Z, Jun 24 to 2100Z, Jun 25
+ SKCC Sprint	0000Z-0200Z, Jun 28
+ Phone Fray	0230Z-0300Z, Jun 28
+ CWops Mini-CWT Test	1300Z-1400Z, Jun 28 and 1900Z-2000Z, Jun 28 and 0300Z-0400Z, Jun 29
+ NCCC RTTY Sprint	0145Z-0215Z, Jun 30
+ NCCC Sprint	0230Z-0300Z, Jun 30

Speaker Bio-Synopsis:

Bio Sketch: Steve's ham radio career began in high school in 1968 with a Novice license (WN2EAJ), followed a year later with a General license (WA2EAJ) and then an Advanced license several years after that. He upgraded to Amateur Extra in 2013 (KS3K). While living in Pennsylvania, Steve was the VP and newsletter editor for the Mid-Atlantic Amateur Radio Club for 6 years. Steve is currently the VP for the West Palm Beach Amateur Radio Group (WPBARG), a member of the Palm Beach County ARES and member of the Palms West Amateur Radio Club (PWARC), the Boca Raton Amateur Radio Association (BRARA), the Quarter Century Wireless Assn (QCWA) and the South Florida DX Association (SFDXA). Steve enjoys contesting, DXing and operating the digital modes from his antenna restricted home in Boynton Beach.

Synopsis: CW Contesting for Non-CW Operators

Using a combination of software and hardware, you can decode incoming Morse Code (CW) transmissions and use macros to send CW exchanges. You can make contacts in CW contests with little or no knowledge of CW and build up your DXCC or state totals and have a lot of fun along the way.

“When radio keeps silent, our ears shall never hear the real details!”

**Ernest Agyemang
Yeboa**

DX Operating News and Information

Credit for the below information and further information on these operations and others can be found at the following website:
<http://www.ng3k.com>

Start	End	DXCC	Call	QSL via	Reported by	Information
2017 May29	2017 Jun04	Saba & St Eustatius	PJ5	LotW	PH2M	By PH2M as PJ5/PH2M fm St Eustatius I; 40-10m; SSB WSPR; 100w (200mw WSPR); end fed wires; QSL also OK via PH2M (Buro or direct)
2017 Jun01	2017 Jun06	Liechtenstein	HB0	M0OXO	DXW.Net	By GM4UYE GM0OBX MM0OKG 2M0JHN as HB0/GM4UYE; 80-6m; charity DXpedition
2017 May22	2017 Jun07	Guadeloupe	FG	DL2AAZ	TDDX	By DL2AAZ as FG/DL2AAZ fm Saint Rose (FK96di); 30-10m; SSB CW; 300w; ground planes; QSL OK via DARC Buro or direct (w/ US\$2 + SAE)
2017 Jun04	2017 Jun16	Reunion	FR	LotW	TDDX	By F4HPX as FR/F4HPX fm St Denis; 40-15m, focus on 20m; 5-100w; SSB JT65 JT9 PSK31 RTTY, perhaps CW; holiday style operation; QSL also OK via eQSL, Club Log
2017 Jun09	2017 Jun18	Palau	T8CW	LotW	DXW.Net	By JH0IXE fm Koror I (IOTA OC-009); 80-6m; CW SSB + digital; QSL also OK via JA0FOX
2017 Jun10	2017 Jun20	Albania	ZA	IK7JWX	DXW.Net	By IK7JWX as ZA/IK7JWX fm Sazan I (IOTA EU-169); HF
2017 Jun11	2017 Jun19	French Polynesia	TX5EG	LotW	TDDX	By F6BCW F6DTZ F6IPT F1MNO F1TCV fm King George I (IOTA OC-131); 80-12m; CW SSB; QSL also OK via F6BCW (Buro or direct), Club Log, eQSL
2017 Jun13	2017 Jun26	Faroe Is	OY	K2HVN	TDDX	By K2HVN as OY/K2HVN fm Torshan; 40-10m; mainly CW; 100w; Buddipole
2017 Jun14	2017 Jun28	Sint Maarten	PJ7	Home Call	W9AEB	By W9DR as PJ7/W9DR, W9KXQ KK9N K9UK W9AEB likewise; PJ7/W9DR on 6m, w/ beacon 50.115.7; 80-10m (2 stations); CW SSB + digital
2017 Jun15	2017 Jun25	Cyprus	5B	LotW	TDDX	By DL6JF as 5B/DL6JF; HF; CW; holiday style operation; QRV for All Asian DX CW Contest
2017 Jun16	2017 Jun23	Palau	T8		TDDX	By JA6UBY as T88RR, JO3LVG as T88MK, JH6DUL as T88VV, JL1HYH as T88HY, JM1LIG as T88FM, JI6NCY as T88NC; 160-6m; CW SSB RTTY
2017 Jun18	2017 Jun28	Montenegro	4O7GD	IK5WWA	425DXN	By IK5WWA; 80-6m; SSB; QSL OK via Buro or direct
2017 Jun24	2017 Jul01	Christmas I	VK9AA	LotW	DXNews	By HL1AHS fm IOTA OC-002 (OK20uj); 80-6m; CW SSB RTTY PSK31; VDA + G5RV; QSL also OK via HL1AHS direct: Sookun Chae, 1007 Jeil Bldg, 379 Yeouidaebang-ro, Yeoungdeungpo-Gu, Seoul, 07333, South Korea
2017 Jun28	2017 Jul02	Palau	T88TJ	Auto Buro	DXNews	By JR1FKR fm Koror I (IOTA OC-009); 40 20 17 15 10m; SSB RTTY
2017 Jun29	2017 Jul17	French Polynesia	TX5EG	LotW	DXNews	By F6BCW F6DTZ F6IPT F1MNO F1TCV fm Huahine I (IOTA OC-067); 80-12m; QSL also OK via F6BCW (Buro or direct), Club Log, eQSL

Your SWR is What?

Dave, KD8NZF

With Field Day fast approaching, we can all look forward to the scramble to get antennas in the air and check their SWR. You do have a perfect 1:1 don't you?

Well, what if it's not 1:1, what's the result? Bird Technologies is generally considered to know a little bit about RF, and on their website you can find a paper titled "VSWR Measurements Using In-Line Power Meters."

Early in the paper they provide this formula relating VSWR to forward and reverse power readings. We usually talk about this as forward and reflected power. PR is Reflected Power and PF is Forward Power. The equation makes me tired just looking at it, so let's use Excel to do all the work. If we enter the formula in Excel and pick some numbers we can get the results shown here. Just for kicks let's also add a column for dB's of Power loss. Of course this is not taking into account anything except the power and there are other factors like coax loss, but it still gives us a feel for what happens when the VSWR rises.

Starting with a perfect SWR and going to a 2:1, our forward power drops from 100W to 90W. Seems like a big loss when you look at Watts. But look at the db. loss. We have only gone from 0 to about .5db.

Jack Althouse, K6NY, SK and former President of Palomar Engineers, frequently wrote articles dealing with SWR and power losses. In one of his articles he maintains that it takes at least a 2db difference in power to be noticeable. Clearly at 2:1 VSWR, we are nowhere close to 2db. So how bad does the VSWR have to be to give a 2 dB loss?

Again returning to Excel and using bigger jumps in the reflected power, you get the results shown.

We reach a 2db loss somewhere around a VSWR of 10:1.

We would never think of running with a VSWR that high and most of our rigs start limiting power at about 3:1, a point where we have only a 1db loss. Keep in mind the rig limiting is done to protect the finals from overheating in the face of the return power, not because of power loss at the antenna. Most of us hang our heads in shame if we can't match closer than 3:1, but actually no one on the receive end is likely to know if your match was 1:1 or 3:1!

$$VSWR = \frac{(1 + \sqrt{\frac{P_R}{P_F}})}{(1 - \sqrt{\frac{P_R}{P_F}})}$$

P _F	P _R	VSWR	db loss
100	0	1	0
99	1	1.223467	-0.04365
98	2	1.333333	-0.08774
97	3	1.426781	-0.13228
96	4	1.512955	-0.17729
95	5	1.595433	-0.22276
94	6	1.676106	-0.26872
93	7	1.756156	-0.31517
92	8	1.836412	-0.36212
91	9	1.917516	-0.40959
90	10	2	-0.45757

P _F	P _R	VSWR	db loss
90	10	2	-0.45757
85	15	2.448775	-0.70581
80	20	3	-0.9691
75	25	3.732051	-1.24939
70	30	4.791288	-1.54902
65	35	6.513131	-1.87087
60	40	9.898979	-2.21849

ARRL Field Day 2017



1pm (18:00 UTC) Sat 24-Jun-17

through

2:59 pm (20:59 UTC) Sun 25 Jun 2017



At the BRARA Ham Shack in West Delray Park

10875 W Atlantic Ave, Delray Beach, FL 33446



EVERYONE IS WELCOME: HAMS, Family, Friends, Perspective HAMS

Talk-In Repeaters: Analog 145.290 MHz (PL 110.9) or DMR 443.300 TS2 TG2

Enjoy FD17 with us:

- 3 Emergency powered stations (15, 20 & 40 m band pass filters)
- SteppIR and 2 Fan Dipoles
- Ham Comradery in Air conditioned comfort

Contacts:

- Gerry Gawaldo 561-706-8338 KG4FUR@yahoo.com or
- Art Lewis 330-518-6868 WA8VSJ@gmail.com

BRARA DMR BASIC TRAINING



1:00 – 5:00pm Sat

22/29 Jul 2017



At the Ham Shack in West Delray Park

10875 W Atlantic Ave, Delray Beach, FL



Pre-Requisites:

- CS750 or MD380/390 (we are teaching these radios)
- Programming Cable for radio (You need it to program)
- PC Laptop (current Windows pre-requisite for programing radio, no Macs)
- Programming Cable and CPS Software (maybe downloaded before class)
- CPS software (maybe downloaded before class/need for programming)
- Unique DMR-MARC ID (must be obtained prior to class to program radio)
- Tech License, Enthusiasm for DMR, willingness to learn

First Day: DMR for Dummies and basic programing

Second Day: Contact Manger (CS and TYT) and Oracle VM Box (TYT only)

Talk-In Repeaters: Analog 145.290 MHz (PL 110.9) or DMR 443.300 TS2 TG2

Contacts:

- Gerry Gawaldo 561-706-8338 KG4FUR@yahoo.com
- Jeff Ronner 415-828-5458 W4AEQ.jeff@gmail.com
- John Quarquesso 954-415-0576 johnq@mig.cc

Fort Pierce Hamfest

Start Date: 08/12/2017

End Date: 08/12/2017

Location: Indian River State College
3209 Virginia Avenue
Fort Pierce, FL 34945

Website: <http://FPARC.org>

Sponsor: Fort Pierce Amateur Radio Club

Type: ARRL Hamfest

Talk-In: 147.345 (PL 107.2)

Public Contact: John Sweigart ,
KK4SHF

4103 Smokey Pines Court Fort Pierce, FL
34951

Phone: 772-905-3552

Email: johnsails@hotmail.com



Free Laurel VEC Testing



Tue 6-Jun-2017, 18:00-19:30,
Broward Gen MC, 1600 S Andrews
Ave, Ft Lauderdale [BARC] (2nd Tue
of every month).

Sun 4-Jun-2017, 10:00 (special) and
Sun 2-Jul-2017, 11:00-13:00, Fire
Station 28, 1040 RPB Blvd, Royal
Palm Beach [PWARC] (1st Sunday of
odd months).

Thu 10-Aug-2017, 19:00-21:00,
Rutherford Com Ctr, 2000 Yamato
Rd, Boca Raton, FL 33498 [BRARA]

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!

Welcome New Members:

KB4EUZ
N4JNL

Fred Linderman
Linda Linderman

For more on BRARA:

www.brara.org

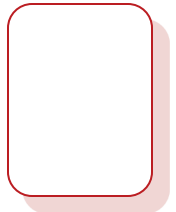
Join us on Twitter [BRARA@N4BRF](https://twitter.com/BRARA_N4BRF)
and on Instagram [#BRARA_N4BRF](https://www.instagram.com/BRARA_N4BRF) as
well as on Facebook.



the Radio Flyer

P.O. Box 480162

Delray Beach, FL 33448-0162



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

