



# HARMONICS

1916

South Jersey Radio Association

2017



## Remote Ham Radio

([www.remotehamradio.com](http://www.remotehamradio.com))

By John, W2HUV, *w2huv at arrl dot net*

In 2014 after being mostly inactive for the previous 40 years, I purchased an Alinco DX-SR8 and installed a 20m dipole in the attic. Yes, you guessed it! My wife and I live in a 55+ community where external antennas, other than a dish, aren't allowed. I wasn't too happy with the performance of the DX-SR8/20m dipole combination. After reading about and researching Remote Ham Radio (RHR) and being intrigued, I joined as a Remote DX member in January of 2015. This didn't allow me to operate the *big gun* stations, so in March of 2015, I bit the bullet and upgraded my membership to Premium DX and haven't looked back.

Currently, RHR offers 20 stations at strategic locations for working DX from the East and West coasts. You control the stations from a universal web console, which is accessible from your PC, MAC, or mobile device. That's all that is required! The console includes controls for the antenna in use, remote Elecraft K3 and remote amp (if available). It also includes a logging program to automatically upload all contacts to LoTW and ClubLog, macros for CW and tabs to access *Chat, Log, DX Spots, Station* and *Calendar* features. If you wish to use a straight key, iambic paddle, foot switch, headphones, and a microphone, you may purchase the *DXMate* box from RHR. If you

wish the touch and feel of a real transceiver in addition to the features of the *DXMate*, you may purchase the Elecraft K3/0 Mini and RRC-1258-MkII from Elecraft.

RHR offers two plans to meet your needs, *RemoteDX* for \$99/year and *PremiumDX* for \$999/year. There are eleven PremiumDX stations and nine RemoteDX stations.

PremiumDX users can use any of the 20 stations. In addition to the annual fees, there are minute charges varying from \$0.09/min for one station to \$0.99/min for two stations. The .09/min station uses an off-center-fed dipole at 100 feet driven by a K3/100. One of the two \$0.99/min stations has a 120 foot rotating Rohn 55 tower with a monster triple stack of 16 element GXP tri-banders at 112 feet/84 feet/56 feet. Also available is a huge three element GXP 40M yagi at 123 feet, which is driven by an SPE Expert 1.3K-FA Amplifier. The other \$0.99/min station has a 100 foot rotating tower of Rohn 45 with a beautifully optimized killer Innov designed quad stack of 7/7/7/7 LFA yagi's at heights 106 feet/86 feet/66 feet/46 feet. This is a dedicated station for 6M only with a 1.5KW 8877 amplifier. Go to "<http://www.remotehamradio.com/premiumdx/>" for the rates, color photos, and descriptions of the PremiumDX stations and the RemoteDX stations.

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## SOUTH JERSEY RADIO ASSOCIATION

HARMONICS is published monthly and is the official news letter of the South Jersey Radio Association. The SJRA was established on June 16, 1916 and has been meeting continuously since its inception. The club has been affiliated with the American Radio Relay League since 1920.

The SJRA meets each month on the fourth Wednesday, January through September; and usually the third Wednesday, October, November and December; in one of the Meeting Room of the Gibson House at 525 East Main Street, Marlton, NJ 08053. Visitors are always welcome at our general meetings. **“Our Meetings are Smoke Free”**

SJRA operates the K2AA Repeater (145.290 - PL 91.5) located in Medford, NJ and the K2UK Repeaters (146.865 and 442.350 - PL 131.8) located in Pine Hill, NJ. The repeaters are open for use without restriction to all licensed amateur operators.

There are currently over 100 SJRA members active in most all aspects of amateur radio. Membership is by application and is subject to the approval of the Board of Directors. Club dues are currently \$30/yr. for memberships, \$22.50/yr. for retired-person membership (62 plus 1 yr membership), and \$15/yr. for additional family members and student membership. Membership information is available on the K2AA Repeater or from Mary Von Lintig, KV2M, 856-772-6475

EMAIL: [sjra at sjra dot org](mailto:sjra@sjra.org) SJRA's web page: [www.sjra.org](http://www.sjra.org)  
 SJRA VE Team: [ve@sjra.org](mailto:ve@sjra.org) is the SJRA/ARRL VUCC card checker  
 Joe Fisher, KC2TN, is the SJRA/ARRL WAS card checker

\*\*\*\*\*  
 ★ Harmonics is now available for SJRA members on the WEB in pdf ★  
 ★ format at: <http://www.sjra.org> ★  
 ★ South Jersey ARRL Section News is available on the WEB at: ★  
 ★ <http://www.arrl.org/sections/?sect=SNJ> ★  
 ★\*\*\*\*\*

### Officers

**President:** Ken Botterbrodt, K2WB  
**Vice Pres.:** Jon Mac Millan, W2MC  
**Treasurer:** Roy Herman, WB2EOD  
**Rec. Sec:** Lou Priestley, N2HQL  
**Cor. .Sec:** Dennis Cioffi, AC2FO

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Art Arnold, N2CPR  
 Matt Grohgans, N2IDW  
 Rick Lawn, W2JAZ  
 John Doran, W2FDJ  
 Tony Canuso, N2ATB  
 Burton Sampley, NJ2IT  
 Al Witner, N3AVT

### Committees:

**Historian:** Mark Walter, KD2JPW  
**Membership:** Alan Handley, K3WWT  
**Field Day:** Ken Botterbrodt, K2WB  
**Contests:** John Doran, W2FDJ  
**Repeater:** Joe Fisher, KC2TN  
**Programs:** Rick Lawn, W2JAZ  
**H&W:** Roy Herman, WB2EOD; and Dara Herman, KC2THQ  
**Awards:** Rick Lawn, W2JAZ  
**Hospitality:** Jean Priestley, KA2YKN  
**Nets:** John Fogleboch, WY2J  
**Publicity:** Vacant (Please Volunteer)  
**Picnic:** Vacant (Please Volunteer)  
**Ways & Means:** Ray Golley, N3RG  
**Property:** Jon Mac Millan, W2MC  
**Web Site:** Ira Weinstein, W2IRA

### Harmonics Staff:

**Publisher/Editor:** Ted Groke, W2TAG  
**Alternate Editor:** Rick Stoneking, W2RDS  
**Circulation:** Mary VonLintig, KV2M; Jim Vecchiola, KR2T

### LOCAL WEEKLY NETS

Monday	K2AA, Medford	145.290 @ 8PM
Fusion on 2 <sup>ND</sup> & 4 <sup>TH</sup> Thurs. and 2M SSB on 3 <sup>RD</sup> Thurs.	Various Locations	145.290 @ 8PM, Fusion 144.270 MHz USB

### Harmonics Deadline

Articles submitted for the next Harmonics will be accepted until Monday, July 10, 2017. Email: [ted.w2tag at gmail dot com](mailto:ted.w2tag@gmail.com)

**SWAP SHOP** - For Sale/Wanted ads are free of charge and are accepted for Amateur Radio related items only. While ads are not restricted to SJRA members, there is only limited space available and members have priority for listings. No items will be accepted for inclusion in the Swap Shop from commercial vendors or traders. All ads must be submitted at least three weeks prior to the scheduled SJRA general meeting date.

**GENERAL ADVERTISING** - Limited commercial advertising is accepted on a space available basis. Annual advertising rates range from \$25/yr (Min 1/8 page) to \$200/yr (Full Page). Information is available from Ken Botterbrodt, K2WB.

## Meeting Minutes

### Meeting of May 31, 2017

The meeting was opened at 1938 by Jon, W2MC, at the Gibson House in Eve-sham, NJ, with a Flag Salute. The question of the day was "what did you do Radio Related this week?" We then introduced ourselves around the room. Jon then announced the Storm robotics team would not be presenting.

Ray, N3RG gave the Treasurer's report, Stating we had 116 Paid up members. His report was approved on a motion by KR2T/WB2EOD. Lou, N2HQL made a motion to approve the minutes of the April Meeting as printed in Harmonics, Seconded by WE2Q, Motion Passed.

Health & Welfare- No report. There was a comment about KA2ZSV being hospitalized.

Programs- by W2JAZ-June- FD Prep: July Magnetic Loop Antennas - : August-Magnetic Webinar on Station Grounding.

K2AA QSO party- Signup sheets available.

VE Testing- Due to test sessions being after deadline, Reports will now be one month behind.

Nets by WY2J- doing well, Complete reports of attendance were given.

DX, by N2VW: Wallis & Fortuna- from August on: TX5D- Austral Isl- on now: 3D2RA- Rotuma Isl- until October: T88IK Palau- 8-15 Oct: VK9DAC- Lord Howe Isl 14-20 Oct.

Radio Sports6/24-25 Field Day: 7/2-8 10-10 int Spirit of 76 QSO party: 7/8 IARU HF World championship: July- Aug North

American QSO party: 9/9-9/11 ARRL Sept VHF Contest: 9/18-18 NJ QSO Party

Repeaters-y Joe KC2TN- Checked 145.29- All readings same as last time. Club Stuff Some Hats and 100th anniv T-shirts available.

Field Day- We may operate 7A if additional people and station are available.

Election results: New Directors will be: N2CPR, N2ATB, N2IDW, W2JAZ, NJ2IT, N3AVT, and W2FDJ

Motion to adjourn: WB2EOD/NJ2IT

### Board of Directors- June 7, 2017

The meeting was held at the "Pop Shop" in Collingswood, NJ, Opened by Ken, K2WB who welcomed new Board Members and thanked departing board members for their service to the club.

Minutes of the May meeting were approved as printed on motion by N2HQL/W2JAZ. Ray, N3RG gave the treasurers report, 116 paid member. Approved, motion by W2JAZ/N2ATB.

A new member was brought up, Richard Frombach (Old member, moved away, then back), AB2X. He was accepted on a motion by N2ATB/AC2FO.

Corresponding Secretary- No report.

Repeater by Joe, KC2TN- new fusion repeaters are available at reduced trade in price, but Joe recommended waiting as digital modes are changing and he feels insufficient information is available to make a replacement decision at this time.

*(Continued on page 8)*

## Radio Sport aka Contests

John, W2FDJ, johnd152 at verizon dot net

### Member's activities

*Please send your thoughts and ideas to me at johnd152 at verizon dot net for publication.*

### Recent posted results - see arrl.org or CQ

I couldn't find anyone that filed logs for the recent CQ WPX contest who listed SJRA as their club. I wasn't able to participate in this one but I did give some hours to the VHF contest.

The ARRL 2017 VHF Contest just completed June 11 and it was two days of Sporadic-E propagation, which drove the fun on six meters. At least four hours on Saturday and many more on Sunday will probably lead to record scores for some. From Southern NJ, stations were heard and worked between 600-1000 miles away towards the west and southwest. Stations in 9 land (IL, WI, IN) 4 land (KY, TN, AL) AND 5 land (AR, MS, LA) were abundant and some very strong at 10-15db over S9. (On my very simple antenna consisting of a copper pipe rotating dipole at about 20 ft.) I would be curious to know if folks with better antenna systems heard and worked other areas of the country and whether any two hops were apparent.

All this 50 Mhz activity took its toll on 2 meters in my opinion. No matter when I listened on two meters, there was very little activity, either conditions were poor or everyone was busy working unusual grid squares on 50 MHz. Even the usual activity you hear on 144 MHz of setting up contacts on the higher bands was absent or scarce. I wonder if as many contacts as usual were made above two meters.

SJRA members were part of this fun in a big way. I heard and worked about ten member stations. I believe another group was operating remote from the mountains as they have done each year.

I had a chance to compare a two meter vertical antenna to my beam. The vertical was a 40 year old Hustler G7-144 that I recently resurrected from my crawl space to use on the new SJRA two meter SSB net (third Thursday of each month on 144.2700

The beam was a Cushcraft A148-10S horizontally polarized with ten elements and up about 20 feet. Since there wasn't much activity, I didn't really get too much from this. The vertical at my location was noisier by a few S units. The beam of course provided more signal as long as I had time to aim it. The Vertical did allow me to make a few contacts fast that I might have missed waiting for my TV rotor to come around. I do need to make some significant improvements in coax and switches for this to be more meaningful.

Please send me your summary sheet so I can list your claimed score. John/W2FDJ

**Upcoming contests** - see arrl.org or wa7bnm.com for rules and more details.

Every Tuesday only

Phone Fray 10:30PM-11PM (yes 30 min)  
(ten weeks -4 times a year)

Every Wednesday only

CWops Mini-CWT test 9 -10AM, 3-4PM,  
9-10PM (three, one hour sprints)

Every Thursday only

NCCC Sprint 10:30PM-11PM (yes 30  
only minutes)

(Continued on page 10)



Joe, KC2TN, at the 2017 Dayton Hamvention.

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# HAM RADIO OUTLET

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## Test Session Report for May 10, 2017

The SJRA would like to congratulate the following on their recent Amateur Radio licensing achievements:

(Please note: Test Session Reports are published in Harmonics the month after the test session so we can publish passing technicians newly assigned call.)

Edward Martz, KD2NOA (new call)  
 607 Broad St.  
 Hainesport, NJ 08036  
 Earned his Tech

Wojciech Malesa, N3XOF  
 440 Larchmont Dr.  
 Delano, NJ 08075  
 Earned his Extra

	Tech	General	Extra	Total
<b>To Date</b>	122	55	28	205

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## Growing the Ranks vs. Growing the Enjoyment

Dan, KB6NU, cwgeek at kb6nu dot com

Because I teach amateur radio classes and publish a series of popular amateur radio license study guides ([www.kb6nu.com/study-guides/](http://www.kb6nu.com/study-guides/)), I often get kudos for "growing the ranks." In fact, Gordon West, WB6NOA, told me this just last week, when he stopped by the booth I was in at the Dayton Hamvention. I'm paraphrasing a little, but after telling me that he's heard good things about my study guides, he said something like, "You're doing good work in helping get more people into ham radio."

People say that as if this is—or should be—the ultimate goal of teaching a license class. While this may be one of the goals, if that's your primary goal, I think that you're barking up the wrong tree.



In a way, creating more hams is selfish. If there are more licensed amateur radio operators, they say, then amateur radio will have more political clout with the FCC and with Congress, making it easier to pass legislation like the Amateur Radio Parity Act. While this may certainly help the new ham down the line, its main thrust is to reduce restrictions on those who are currently hams.

My goal in teaching amateur radio classes isn't to create more hams. Instead, my goal is to help more people have fun with ham radio. The first step in helping people have fun with ham radio is, of course, helping them get their license. I do that by publishing my study guides and teaching ham classes.

The next step, and I'm only really getting started on this right now, is to help people learn what they need to know to become better ham radio operators. That's why I got a little excited when I saw the article, "Making a Good hobby Better Through Post-Licensing Enrichment" by Tim Busch, N0CKR in the latest issue of *Radio Waves*, the ARRL's email newsletter for amateur radio instructors.

In the article, Tim describes several activities that his club encourages, including a "new ham net" and the Field Day GOTA station, but he also details a program of "mini classes" that will teach specific skills related to ham radio. These include:

- ◆ Programming Radios and Getting on the Air
- ◆ Soldering 101
- ◆ Multimeter 101
- ◆ Build and Use a Roll-Up J-Pole Antenna

(Continued on page 7)

*(Growing Ranks vs. Growing Enjoyment from page 6)*

- ◆ Build and Use a Satellite Antenna
- ◆ Foxhunts
- ◆ Operating Digital Modes: IRLP, AllStar, D-Star, EchoLink, etc.
- ◆ Remote Operation
- ◆ Software-Defined Radios
- ◆ Transitioning from VHF/UHF to HF Operating
- ◆ Chasing Awards
- ◆ Learn CW
- ◆ Contesting

Tim writes, "Each class is intended to be no more than two hours at a sitting, so they can be held before a monthly club meeting. The variety of subject matter allows many club members to get involved in leading a topic. Materials kits are prepared in advance, so students go home with practical items they can use."

I think this is a great set of classes, and I plan to try some of these in the fall. Other topics that occur to me are:

- ◆ Power Supplies 101
- ◆ Mobile Operation 101
- ◆ ARRL 101
- ◆ RFI/TVI 101

Helping new hams—and old hams—have more fun with amateur radio is a lot more satisfying to me than just "growing the ranks." It would be nice to say that we have a million licensed radio amateurs in the U.S., but I think it would be a lot more valuable to the hobby to say that a larger percentage of licensed hams were active and enjoying ham radio. I know that, for me, increasing the number of active, engaged hams would be more personally satisfying than simply creating a lot of new licensees.



*(Continued on page 10)*

## ARRL Propagation Outlook for Field Day

By Bob Beyer, KE2D

Early this evening I caught most of the ARRL propagation forecast being broadcast on 80m PSK31

You can also find it on the ARRL archive site:

<http://www.arrl.org/w1aw-bulletins-archive/ARLP021/2017>

The good news is that at the moment, the outlook for Field Day is looking good. This may not be the fantastic conditions we'd all love but since we're at the bottom of the cycle, "good" is the new great. Of course what's good for us is good for everyone else too, so if you find yourself making QSOs by the hundreds a few weekends from now, don't take your foot off the gas because everyone else will be too. Push harder.

This particular blurb in the forecast caught my eye:

ARRL Field Day is only four weeks away. We get 45-day predictions for solar flux and planetary A index, and the prediction for Field Day weekend (June 24 and 25) looks good. On June 23 to 25 (including the previous Friday) predicted planetary A index is 5 (good) and solar flux is 76 on Friday and 74 on Saturday and Sunday (not bad).

This forecast will be updated several more times so let's cross our fingers and hope it gets even better.



## President's Message

Ken – K2WB

At the writing of this column the SJRA will be 101 years old. It is a privilege being part of the next 100 years of the new history of the SJRA.

Being an odd numbered year the current SJRA Board of Directors and officers term ends at the June general membership meeting. I want to thank Ira W2IRA and Ted KD2ARD for their service on the board and to the SJRA. I enjoyed working with both and hope to see them on the board again in the future.

The new board and officers will be installed at the June General Membership meeting.

Our Field Day operation is world class. We have fun and still manage to hold a strong position in the top 4 in our category of 6A. Most times we place 1st or 2nd and we continue learn from each other to improve. It is a great opportunity to meet and work with fellow SJRA members. This year we are going to attempt to run 7A by the addition of a digital station.

By the way, it sounds like the Club QSO party inaugural year was a reasonable success. Based on the emails there will be changes for next year's event. If you have ideas please forward them to me.



(Meeting Minutes from page 3)

Trustee report- no complaints received at this time.

Club stuff- some sizes of t-shirt are still available.

Health & Welfare by Roy, WB2EOD-K2VFE had heart surgery.

Programs: See Above

KC2TN suggested we start a "Mario Table" at our meetings.

There was a suggestion that we take a table at the "SJ ARRL Convention"

FD- Ken plans a Webex meeting to discuss site plan. A band Captain is needed for digital modes to work as 7A. He received a message that the Governor would be unable to attend.

Old Business- the club QSO party was discussed.

New business: discussion regarding setting up a club station at Collingswood High.

Minutes by: Lou, N2HQL, Rec. Sec.



The new ICOM IC-7610 as shown in Dayton this year



Our 2017-2018 Board of Directors (In Back from Left): Rick, W2JAZ; Matt, N2IDW; (In Front from Left): Tony, N2ATB; Art, N2CPR; John, W2FTD; Burton, NJ2IT; and Al, N3ATV.



Ted, W2TAG and Joe, KC2TN, shelter from the rain at the 2017 Dayton Hamvention.



Elecraft display at the 2017 Dayton Hamvention.

*(Remote Ham Radio from page 1)*

The cost for the privilege of operating RHR stations is more than offset by: 1) You can enjoy your hobby when circumstances prevent you from setting-up a station of your own, 2) The fees members pay cover the capital and maintenance costs of the stations available, and 3) Stations are available that non-members can only dream of operating.

RHR is a 21st century alternative that you should consider when contemplating assembling a station of your own. Don't hesitate to contact the author if you have any questions.



Outside at the 2017 Dayton Hamvention.



Inside at the 2017 Dayton Hamvention.

*(Radio Sport aka Contests from page 4)*

Amateur Radio Club QSO Party  
6/16-18, Friday 8PM EDT to Sunday 8PM.

ARRL Field Day  
6/24-25, Saturday 2PM EDT to Sunday 5PM.

10-10 International Spirit of 76 QSO Party  
7/2-8, Saturday 8:01PM EDT to Sunday 8PM.

IARU HF World Championship  
7/8, Saturday 8AM EDT to Sunday 8AM.

North American QSO Party RTTY  
7/15-16, Saturday 2PM EDT to Sunday 2AM

North American QSO Party CW  
8/5-6, Saturday 2PM EDT to Sunday 2AM.

North American QSO Party SSB  
8/19-20, Saturday 2PM EDT to Sunday 2AM

*(Growing Ranks vs. Growing Enjoyment from page 7)*

*When he's not working on helping new hams, Dan operates CW on the HF bands and blogs about amateur radio at KB6NU.Com. If you have a good idea for a new ham "mini class," e-mail him at cwgeek at kb6nu dot com.*

## List Your "For Sale" Ham Stuff in the SJRA Harmonics

Email Ted, W2TAG, with your listing, ted.w2tag at gmail dot com

## SJRA Jackets, Shirts, Hats

Order NOW - Next order going in soon!



Spring Jacket is \$51 (S,M,L,XL), Fall Jacket is \$58 (S,M,L,XL),  
Shirts are \$28 (S,M,L,XL), Hats are \$25 (one size fits all)  
Name and Call Sign embroidery included....Larger sizes slightly more!  
Email Joe, KC2TN, with orders or additional info: [kc2tn at comcast dot net](mailto:kc2tn@comcast.net)

### Amateur Radio FCC License Testing

The SJRA sponsors *FREE* Amateur Radio FCC License testing on the second Wednesday of each month. The location is: 443 Commerce Lane, Suite 5, West Berlin, NJ 08091. Registration is at 7:00 PM and testing begins at 7:30PM. Walk-ins are accepted.

VE team members can be reached at VE *at* SJRA *dot* org. A calendar and more information can be found on the SJRA web site.

**June Meeting:**

Is the **Fourth** Wednesday, June 28, 2017

The meeting commences promptly at 7:30PM in the first floor Meeting Room of the Gibson House on Main Street, Marlton, NJ 08053. Guests are always welcome.

**Program For June:**

Installation of newly elected Officers and Board of Directors plus to be announced presentation.

**SJRA Member July Birthdays**

Don Beaulieu, WA2DUE; Anthony Dianora, KC2HHX; John Doran, W2FDJ; Craig Henning, NC2H; and Carol Hutkin, K2BL.

Health and Welfare Co-chairpersons: Roy, WB2EOD and Dara, KC2THQ

**July Meeting:**

Is the **Fourth** Wednesday, July 26, 2017

**First Class Mail**

South Jersey Radio Association  
PO Box 1026  
Haddonfield, NJ 08033

