



# HARMONICS

1916

South Jersey Radio Association

2019



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### President's Message

Ken- K2WB

Fall will be here soon, Autumnal Equinox is September 23rd. If you look carefully the signs are already showing, with a little yellow, or red is starting to appear from the green of summer. This is the best time to spruce up the antenna farm and get ready for the fall radio contest and DX season. Get help with any big projects. There are many members with knowledge and experience

that will help make your project safe and successful.

If you participated in the ARRL September VHF contest, send your log to the league noting the SJRA as your affiliation. This is a club competition; VHF contesting is easy to do and does not require special equipment. Most of our members are located in grid squares FM29 or FN20. Remember logs are due 10:59 PM on Wednesday

*(Continued on page 6)*

## 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 Rooms 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 SJRA website: [www.sjra.org](http://www.sjra.org) or from Alan Handley, K3WWT, 610-532-5407 Email: [sjra@sjra.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

### Officers

**President:** Ken Botterbrodt, K2WB  
**Vice Pres.:** John Doran, W2FDJ  
**Treasurer:** Roy Herman, WB2EOD  
**Rec. Sec:** Carl Hyde, W2CSH  
**Cor. Sec:** Dennis Cioffi, AC2FO

### Directors:

Art Arnold, N2CPR  
 Tony Canuso, N2ATB  
 Holden Correia-Fisher, KD2JPV  
 Matt Grohgans, N2IDW  
 Rick Lawn, W2JAZ  
 Frank Longbottom, AA2AW  
 Al Witner, N3AVT

### Committees:

**Historian:** Mark Walters, KD2JPW  
**Membership:** Art Arnold, N2CPR  
**Field Day:** Ken Botterbrodt, K2WB  
**Contests:** John Doran, W2FDJ  
**Repeater:** Robert Sunbury, K2UQ  
**Programs:** Carl Hyde, W2CSH & Rick Lawn, W2JAZ  
**H&W:** Roy Herman, WB2EOD; and Dara Herman, KC2THQ  
**Awards:** Jim Higgins, KC2SZ  
**Hospitality:** Jean Priestley, KA2YKN  
**Nets:** Matt Grohgans, N2IDW  
**Publicity:** John Jones, KD2RKA  
**Picnic:** **Vacant (Please Volunteer)**  
**Ways & Means:** Roy Herman, WB2EOD  
**Property:** Frank Longbottom, AA2AW  
**Web Site:** Ira Weinstein, W2IRA

### Harmonics Staff:

**Publisher/Editor:** Al Ziegler, KD2ST  
**Alternate Editors:** Ted Groke, N8MP  
**Circulation:** Jim Vecchiola, KR2T

\*\*\*\*\*  
 ★ 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/Groups/view/southern-new-jersey> ★  
 ★ \*\*\*\*\*

### LOCAL WEEKLY NETS

Mondays FM Net; Swap Net every 4th Monday	K2AA Repeater, PL: 91.5	145.290 @ 8PM
Fusion on 2 <sup>ND</sup> & 4 <sup>TH</sup> Thurs.	K2AA Repeater, DN mode	145.290 @ 8PM, Fusion
6M SSB on 1 <sup>st</sup> Thurs.		50.150 MHz USB @ 8PM
2M SSB on 3 <sup>RD</sup> Thurs.		144.260 MHz USB @ 8PM

### Harmonics Deadline

Articles submitted for the next Harmonics will be accepted until Monday, October 7, 2019. Email:

[harmonics@sjra.org](mailto:harmonics@sjra.org)

**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

### Minutes of August 28, 2019 General Meeting

The meeting was called to order at 7:33PM.

Members and Guests were welcomed by Ken, K2WB.

The question of the night was planned participation for the Sept 15 VHF Contest.

Attendance - 30 Members, 1 Guest, 4 internet attendees.

The July meeting minutes were approved.

Treasurers Report - Roy, WB2EOD presented the treasurers report.

Membership - Art, N2CPR informed the club that there are eight new prospective members in the queue.

Repeater - Bob, K2UQ reported that the K2UK repeater is well and that the committee is looking to get internet connectivity for Wires-X at the site.

Contests - John, W2FTJ encouraged participation in the VHF contest and emphasized that the NJ QSO Party has new rules making participation more rewarding.

Programs - Rick, W2JAZ gave his final report that Programs are scheduled through March of 2020.

Nets - Matt, N2IDW reported on the status of the weekly nets. It was decided to put forth a BOD discussion to start some nets on the K2UK repeater to increase its visibility.

Publicity - John, KD2RKS discussed the mailings that were sent out to advertise the club to newly licensed and upgraded hams in the area. The mailing was very well received by all. John also discussed the planned Dayton 2020 bus trip which is well on its way to success. Details have been sent out in Harmonics.

Health and Welfare - Roy, WB2EOD stated that a card and message of condolence had been sent to Mark Walters, KD2 JPW and his family.

Old Business - None

New Business - Gloucester City Hamfest is Sept. 15<sup>th</sup>. SJRA will have publicity and information at the event.

The meeting was turned over to the Programs director for an excellent and informative presentation from Rob Sherwood, NC0B

Submitted: By Carl, W2CSH

## Automatic Antenna Selection for a Remotely Controlled Station

By John Hill, W2HUV

I submitted an article with this title to QST back in March. I was advised of the tentative decision to publish it in the 2019 November issue in June. I completed proofreading the copy in the first week of September. It appears that it will be published in the 2019 November issue as planned!

The article describes how I added automatic antenna selection circuitry and LED indication to the tiny 3-3/4 × 2-3/4 × 1-3/4 inch box for the MFJ-4716RC remote control selector switch for the MFJ-4716 six-position antenna switch purchased for the Gloucester County Amateur Radio Club (GCARC) HF station (W2MMD). This was part my project to provide remote control for that station.

You'll have to read the article for more information. I am very excited about it because it will be my first article published in a major magazine. Please look at it when the November issue of QST comes out. The digital version of the magazine should be available in the first week of October.

## SJRA Elmer Team

The Elmer team is willing, able and eager to help with your questions and problems. And remember, there is no such thing as a dumb question.

**Art Arnold, N2CPR - artarnold at yahoo dot com.** Art can assist you in the following areas: Setting up your first station; HF radio selection/operation; Antennas; Programming the big three Japanese HTs

**Tony Canuso, N2ATB - f\_canuso at yahoo dot com.** Tony can provide assistance with CW operation and Digital Voice modes and equipment

**John Fogleboch, WY2J - WY2J at arrl dot net.** John is on call to help with: Antenna theory, modeling & design; RF circuit design & analysis; Practical transceivers, tuners, transmission lines & other hardware; HF, VHF & UHF propagation; Radio communication system design.

**Ray Golley, N3RG - rgolley at comcast dot net.** Ray can help with VHF/UHF/microwave operations including EME; CW and WSJT modes.

**Bob Applegate, K2UT- bob at applegate dot org;** cell (856) 220-6609. Bob can provide assistance with Arduino design.

**Rick Lawn, W2JAZ - rjlawn at gmail dot com.** Rick has offered to help with Satellite stations and operation as well as HF digital modes. He also has some knowledge with DX Labs, Ham Radio Deluxe, Amateur Contact Log and Log4OM software. He is familiar with Macs and Windows PCs for ham radio application.

## Items for Sale

I am considering selling my **Kenwood TS-990**. Interested parties can contact Roy at **wb2eod at arrl dot net**

**SPE Expert Linear 2K-FA Amplifier** for sale locally- I prefer not to ship. This is SPE's flagship amp and is in perfect condition. Specs can be found at: <http://expertlinears.com/2k-fa.html>. Reduced price: \$4,500.

Please contact Joe by email: **kc2tn at comcast dot net**

### Antennas for Sale:

**Cushcraft A3W** with 30m driven element. For WARC bands 30/17/12m: \$150.00

**Hy-Gain TH6DXX** – 20/15/10m: \$150.00

**Hy-Gain 402BA** – 2 Element 40m Beam: \$200.00

They will be available before the end of June. They will be disassembled and marked for easy reassembly and transportation. Contact by email: **ken at k2wb dot com**

**Cushcraft Model A-3WS** 3 element WARC bands beam antenna still in the box never opened. Will accept any reasonable offer for it or willing to trade or deal. If interested please contact **Jack Froehlich, W2AF** at **856-809-2965** or **609-352-9696**.

The antenna can be picked up in Atco, NJ. Thank you for your time.

## New Jersey QSO Party

Sponsored by Burlington County Radio Club, K2TD

**Date:** September 21, 2019. Note: One day only this year.

**Time:** Sat. 1200 (Noon) EDT (1600 UTC) to 2359 EDT (0359 UTC).

**Bands:** 80, 40, 20, 15 & 10 meters ONLY.

### Modes:

- CW, Digital and Phone. Note: For the first time, digital modes will be allowed this year.
- Each digital or CW Contact will count as 2 points and phone contacts remain 1 point.
- Power multiplier is 1x for 150 watts and above, 2x for less than 150 watts, and 4x for QRP (5 watts or less at ALL times during the NJQP).
- There will be no bonus station this year.

### NJ Club Aggregate Score:

- Entrants should specify which ARRL affiliated club, if any, they wish their score to be attributed.
- Must be a bona-fide member in good standing of said club.

### Exchange:

- NJ Stations RS(T) and county.
- Out of NJ stations RS(T) and state/province/DX.
- All DX Stations use DX.

See [http://www.k2td-bcrc.org/njqp/njqp\\_rules.html](http://www.k2td-bcrc.org/njqp/njqp_rules.html) for full details.



## SJRA Monthly Breakfast

Join us on the second Saturday every month at 9:15 am at the **Bob Evans Restaurant**; 601 Fellowship Rd, Mount Laurel, NJ 08054 for an informal get together.

## New Members

The SJRA would like to welcome the following new member to our Club:

- Walter C. Reeves - KD2RRU
- Mario Tagliaferri - W3CGS
- Edward K. Oden - N2TYS
- Paul Ciarlo - K2IBZ
- Darrin M. Marlone - KD2ALQ
- John Keano - N3XKD

## SJRA Membership Drive

Attention SJRA Members: Starting June 1st- Sign up two new members by December 31, 2019 and get your 2020 Membership free.

For additional information please contact Art, N2CPR or email:

**Membership at [sjra dot org](mailto:sjra@sjra.org)**

*(President's Message from page 1)*

September 26, 2018. The ARRL lists it in UTC.

The SJRA has grown beyond 121 Members. Mostly due to the efforts of our VE team and our publicity committee. We continue to run our membership drive. So far no one is has tried to recruit friends. It is easy, sponsor two new members and get next year's membership for free. It could not be any easier. Contact Art, N2CPR or Allan, K3WWT for more details.

The Club QSO Party rules are completed and started to be distributed. This is a fun activity. There is a double dip opportunity. If you operate as K2AA/103, the contacts you make count towards your own contacts. The best part is that you can work the same stations again as yourself when you are not operating as K2AA/103. Contact me **ken at k2wb dot com** if you would like to sign up to operate as K2AA from your own QTH. The 2019 Club QSO Party will be on October 19<sup>th</sup> at 18:00 UTC (14:00 EDST) and will run to Sunday October 20<sup>th</sup> at 17:59 UTC (13:59 EDST).

Lastly, there are number of members of the club who can no longer make it to the meetings for various reasons. The Health and Welfare committee can coordinate riders with drivers. If you can't make it the meeting because of transportation issues or would like to help, or would like to offer your services contact Roy, WB2EOD or Dara, KC2THQ.

As always, the SJRA is looking for more members, bring a friend to a meeting. With some luck and encouragement, they may even join and become a SJRA member.

73's

Ken, K2WB

## 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.

The Club QSO Party is coming up fast on Oct 19/20. Please plan to join in the fun and to operate K2AA/103. It's a quick 24 hour event that pits Amateur Radio Clubs against each other. Individuals in each club and overall who score highly will receive awards. The contest is open to any amateur regardless of club affiliation.

**Upcoming Contests** - see [arrl.org](http://arrl.org) or [contestcalendar.com](http://contestcalendar.com) for rules and more details.

### Every Tuesday only

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

### Every Wednesday only

**CWops Mini-CWT test** 9 -10AM, 3-4PM,  
11-12PM (three one hr. sprints)

### Every Thursday only

**NCCC Sprint** 10:30PM-11PM. (yes 30 min.)

### Every Thursday only

**NCCC RTTY Sprint** 9:45-10:15PM. (30 min.)

### 50 Mhz Fall Sprint

8/24, Sat 7PM EDT to Sat 11PM. 6mtr;  
mode not specified

**New Jersey QSO Party:** 9/21-22, Sat  
2PM EDT to midnight Sun. HF- CW, SSB.

**144 Mhz Fall Sprint:** 9/23, Mon 7PM  
EDT to 11PM. 2m only. Modes not specified.

**CQ WW DX Contest RTTY:** 9/27-29 Fri  
8PM EDT to Sun 8PM. HF - RTTY.

**222 Mhz Fall Sprint:** 10/1, Tue 7PM EDT  
to 11PM. 222 Mhz. Mode not specified.

**Oceania DX Contest Phone:**10/5-6, Sat  
4AM EDT to Sun 4AM. HF; Phone

**432 Mhz Fall Sprint:** 10/9, Wed 7PM  
EDT to 11PM. 432 Mhz. Mode not specified.

**Microwave Fall Sprint:** 10/12, Sat 8AM  
EDT to 2PM. Microwave- mode not specified.

### Looking Longer Range:

**Oceania DX Contest CW:** 10/12-13, Sat  
4AM EDT to Sun 4AM. HF - CW

**ARRL School Club Roundup:** 10/14-18,  
Mon 9AM EDT to Fri 8PM. All except  
60,30,17, & 12m. CW, Phone, Digital

**Club QSO Party (SJRA sponsored):**  
10/19-20, Sat 2PM EDT to Sun 2PM. HF,  
6m, 2m, 70cm. Any mode.



## SJRA Club QSO Party

**This is a great opportunity to get on the air and promote the SJRA!**

**Dates:** October 19 & 20th

**Time:** Saturday 18:00 UTC (2PM EDST) to Sunday 17:59 UTC (13:59 EDST).

**Objective:** Work as many Amateur Radio Club members as possible and Listed Amateur Radio Club Stations.

**Bands & Modes:** All amateur radio bands with the exception of 60m, 30m, 17m & 12m and all modes including repeater contacts will be accepted.

Any K2AA operator effort will count as your own personal effort.

See upcoming announcements for sign-up sheet and full details.

## Upcoming Regional Hamfests October 2019

October 20th: **RF Hill Amateur Radio Club Hamfest** 7:00am at The Sellersville Fire House, 50 N. Main St, Sellersville, PA.  
Website: <http://rfhillarc.club/hamfest/>

## SJRA is Now on Facebook

For those who have not heard, we have a SJRA group page on Facebook. It allows us to share files/pictures, demonstration videos, announcements, reminders, etc. If you are active on Facebook, please join us and invite any prospective SJRA members to do the same.



<https://www.facebook.com/groups/SJRA.K2AA/>

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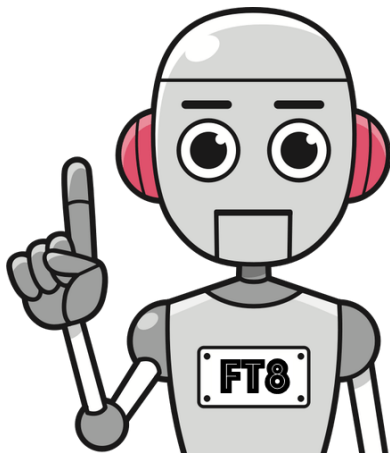
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**SOUTH JERSEY RADIO ASSN.**  
100 YEARS  
1916 2016  
AMATEUR RADIO  
**K2AA**

## DXpedition to use FT8 Robot?

By Dan Romanchik, KB6NU



It's inevitable. At some point, machines are going to render humans irrelevant. It's been a recurring theme in science fiction since before I was born (1955), and there are numerous predictions of the Singularity, the point in time when machines will be smarter than human, occurring between 2030 and 2045.

It may happen in amateur radio sooner than we think. A couple of days ago, one of my readers, sent me a link to a blog post by John, AE5X: Automated FT8 "FoxBot" in upcoming DXpedition - confirmed. He wrote:

"A DXpedition to Tokelau will take place from 1 to 11 October and it will be your chance to work an FT8 robot operating in Fox/Hound mode.

"Stathis SV5DKL has been working on a "FoxBot" for some time now, is listed as a partner to this DXpedition and has confirmed that the DXpedition will be using his FoxBot."

John has since updated this post, noting "The SV5DKL logo has now been removed and the DX team will be in 'full compliance' with the mode." Full compliance meaning following the rules set up by the ARRL DXCC rules.

The ARRL is, of course, against the use of robots. A recent *ARRL Letter* noted:

"ARRL has incorporated changes to the rules for all ARRL-sponsored contests and DXCC, prohibiting automated contacts and requiring that an actual operator is initiating and carrying out a contact. These changes also apply to Worked All States (including Triple Play and 5-Band WAS), Fred Fish W5FF Memorial, and VUCC awards. The changes are effective immediately and affect the rules for both HF contests, and VHF/UHF contests as well as DXCC.

"A resolution at the July ARRL Board of Directors meeting pointed to 'growing concern over fully automated contacts being made and claimed' for contest and for DXCC credit. The rules now require that each claimed contact include contemporaneous direct initiation by the operator on both sides of the contact. Initiation of a contact may either be local or remote."

As AE5X says, however, the use of FT8 robots in the future is a certainty. Sooner or later, some DXpedition is going to use an FT8 robot without saying anything about it. How is the ARRL going to know that a DXpedition is using robots if the DXpedition operators don't tell them?

I'm wondering when some DXpedition is going to give up on SSB and CW altogether. Why bother with those modes when you can make hundreds or thousands more contacts by just operating FT8?

*(Continued on page 10)*

(DXpedition to use FT8 Robot? Continued from page 9)

Another thought just occurred to me. If the ARRL gets its way and Techs are awarded HF digital privileges, how long will it take for some enterprising Tech to make the DXCC Honor Roll using FT8 exclusively. Oh, the horror of it all!



Dan Romanchik, KB6NU, is the author of the KB6NU amateur radio blog ([KB6NU.Com](http://KB6NU.Com)), the "No Nonsense" amateur radio license study guides ([KB6NU.Com/study-guides/](http://KB6NU.Com/study-guides/)), and often appears on the ICQPodcast ([icqpodcast.com](http://icqpodcast.com)). When he's not wondering when robots are going to take over the world, he likes to (manually) operate CW on the HF bands.

**Consignment Auction**

This month's program is the Consignment Auction, so bring your spare gear and we will sell it for you. Also, bring plenty of money because you will want to bid on those nice items others are bringing to the sale. The auction benefits the club thru a suggested donation of \$5, collected from the Sellers. Bidders are, of course, free. Auction amounts go directly to the sellers. This is a FUN event, hosted by SJRA. Remember to bring your old Ham Stuff and turn it into Green!

**VE Report for August 21, 2019**

The SJRA would like to congratulate the following on their recent achievements.

**Thomas P Barrett, KD2SOT**  
 303 4th Avenue  
 Chesilhurst, NJ 08089  
 Earned his Tech

**Joseph Cella, KD2SHJ**  
 164 Hurffville Crosskeys Rd.  
 Sewell, NJ 08080  
 Earned his Extra

**Brian M Gross, KD2FJX**  
 154 Merion Circle  
 Marlton, NJ 08053  
 Earned his General

**Joseph B Phillips, KD2SOR**  
 6 Colts Neck Dr.  
 Sicklerville, NJ 08081  
 Earned his Tech

**Total New or Upgrades to Date**

Tech	General	Extra	Total
166	77	39	282

**The 300<sup>th</sup> person to obtain an initial license or upgrade with the SJRA VE team wins free SJRA Membership for one year!**

## 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 \$20 (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

### Amateur Radio FCC License Testing

The SJRA sponsors *FREE* Amateur Radio FCC License testing on the third Wednesday of each month, except Nov & Dec. TBD. The location is: New Brooklyn United Methodist Church; 1336 E. Malaga Rd. Williamstown, NJ 08094. Registration is at 7:00 PM and testing begins at 7:30 PM. 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.

**September Meeting:****Is the Fourth Wednesday, September 25, 2019**

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

**Program For September:**

Our program for September is the Consignment Auction.

**SJRA Member October Birthdays**

October Birthdays are: Bill Dreisbach, KB2MMI; Craig Hodsdon, WE2Q; Ken Hoffner, KD2OZC; Gene Kuhns, WB2WEK; Burton Sampley, NJ2IT; Robert D Turner, Jr. N2SCJ; Jim Vecchiola, KR2T

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

**October Meeting:****Is the Fourth Wednesday, October 23, 2019.****First Class Mail**

South Jersey Radio Association  
15 Pelham Road  
Marlton, NJ 08053

