



# HARMONICS

1916 South Jersey Radio Association 2019



## Conference Special

### President's Message

Ken- K2WB

Our white elephant sale went very well. Lots of goodies for redistribution. Some may come back next year, you will never know.

The weather this month has been interesting. I put out several calls on the repeater to see who was listening... and reached no-one. When the weather turns bad or something out of the ordinary happens., it is a good idea to monitor the K2AA repeater. Should power go out and the repeater is not working, monitor 146.52.

Field Day will be here before we know it. Time to start thinking what you can do for the SJRA at field day, we are a team and it requires a lot of help to keep the SJRA #1 in the 7A category. Contact me and be part of the team! This is our only club event and THE SJRA NEEDS YOU.

Sometime this spring when the weather gets better, we will have a SJRA trailer work party. Plans are starting to get underway. Please contact me if you are interested in helping.

We are still running our membership drive. All you need to do recommend four members get a 2020 membership for free.

Roy, WB2EOD has been getting a large number of Membership Renewals; we have more than 80 members and hopefully more to come. If you had not done so it is now time, otherwise you will not be receiving harmonics after this issue. Please send in your SJRA membership renewal as soon as you can, act now so you don't get missed in the next roster.

Support our nets and check in. It is a good way to meet other members of the club. Check in today and it is ok to just listen.

It was almost a year ago since Ted, W2TAG put in his retirement request as editor of Harmonics. Al, KD2ST stepped up and is doing a great job carry on the tradition of Harmonics Editor. Thank you, Al. Please support Al by writing articles for Harmonics.

Joe, KC2TN has submitted his request to retire as chairperson of the repeater committee. Rick, W2JAZ also wishes to retire as the Program Chairman and Awards

(Continued on page 7)

## 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.:** Jon MacMillan, W2MC  
**Treasurer:** Roy Herman, WB2EOD  
**Rec. Sec:** Lou Priestley, N2HQL  
**Cor. Sec:** Dennis Cioffi, AC2FO

### Directors:

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

### Committees:

**Historian:** Mark Walters, KD2JPW  
**Membership:** Art Arnold, N2CPR and 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:** Matt Grohgans, N2IDW  
**Publicity:** Vacant (Please Volunteer)  
**Picnic:** Vacant (Please Volunteer)  
**Ways & Means:** Roy Herman, WB2EOD  
**Property:** Jon MacMillan, W2MC  
**Web Site:** Ira Weinstein, W2IRA

### Harmonics Staff:

**Publisher/Editor:** Al Ziegler, KD2ST  
**Alternate Editors:** Ted Groke, W2TAG and Jon MacMillan, W2MC  
**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, April 8, 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

### Membership Meeting of February 27, 2019

The meeting was opened at 1937 by Ken, K2WB, with a Flag Salute. The minutes of the January meeting were approved as printed in Harmonics, motion N2HQL/WA2HJG.

Treasurer's report by Roy, WB2EOD - 82 paid up members, report accepted, motion by N2HQL/KC2SGV.

Health & Welfare- by Roy, WB2EOD-KA2SZV, Phil Webber has become SK, found in QST listings. Card sent to family.

Membership by Art, N2CPR; Reminded all that one member per quarter will get you free dues in 2020. He has one application for consideration by the board, Dave Miller currently n/c. He must retest to get his license back.

Historian, Mark, KD2JPW - brought in a 1972 Harmonics, and a special edition 1954 "Hamfest edition"

Harmonics- Al, KD2ST - got suggestion for a "conference edition".

Repeaters- still working.

Club Stuff- Joe KC2TN; hats back in stock, no outstanding clothing orders.

VE team- Al, N3AVT; Four applicants this month, all passed at least one level. The count since starting the team is 256 tests passed; 156 Tech; 67 General; 37 extra (adds up to 260).

Nets- Matt, N2IDW- things have been successful, we are thinking of adding another Thursday net.

Programs- W2JAZ- Feb- white elephant sale: March- N2RJ on Flex radio: April- Am-sat: May - Storm Robotics.

Elmer team was introduced- N2CPR, N2ATB, WY2J, N3RG, W2JAZ.

Radiosport- John W2FDJ: Mar 1-3 ARRL DX SSB; Mar 29-31 CQWW WPX SSB; Apr 8 144 Mhz spring sprint: Apr 14 ARRL Rookie roundup: Apr 16 222 Mhz Spring sprint: Apr 24 432 MHZ Spring sprint.

Old business - Conference; we have an ARRL speaker, and ARRL sanction.

New Business: none.

Submitted by N2HQL

### Minutes of February 6, 2019 BOD Meeting

Opened at 1927 by Ken, K2WB, at the Gibson House in Evesham, NJ.

Repeater: by Joe, KC2TN - they are working. Joe stated he has managed the repeaters for 10 years, mostly alone, and needs a new repeater chairperson/maintenance person. He would like to back down from this position, but will remain active while training the new chairperson.

Clothing - by Joe, KC2TN - no orders outstanding.

Minutes - Approved as submitted, motion by N2HQL/W2MC.

Treasurer- Roy, WB2EOD-71 paid up so far. Motion by N2ATB/W2JAZ- accepted.

Membership: Art, N2CPR- Brian Gross, KD2FJX; Al Wrigley, KI2J; Bob Applegate, K2UT, Robert Parke, N/C. They were accepted on motion by W2MC/W2JAZ. Kudos to membership committee by Ken, K2WB.

*(Continued on page 9)*

## SJRA 2019 RADIO CONFERENCE

An event to share ideas, experiences, knowledge and fellowship among persons interested in Amateur Radio.



**At The Hotel ML**

915 Route 73

Mt. Laurel, NJ 08054

**Sunday, March 24, 2019**



### Open to the Public

8:30 AM to 5 PM

\$35 Entrance Fee per person.

Lunch Included.

Sponsored by The South Jersey Radio Association: <https://sjra.org>

### Event Talk-In: K2AA Repeater

145.290 Mhz (91.5 PL)

- Bring your HT and we will help program in local repeaters.
- Limited test equipment (power supply & dummy load) will be available to help diagnose and test radios.

## Conference Highlights

**Volunteer Exam Session (Free to all Applicants) starts at 8:30AM**

### Demonstrations

#### Seminars– Preliminary Topics (subject to change):

- I got my license and now what?
  - My first QSO (Live Demo)
- Introduction to Modes of Operations
- Demo of Various Modes; CW, AM, SSB, FM, C4FM, FT8, PSK, RTTY & DMR
  - QSLing– LOTW, eQSL, QSL Bureaus
    - Amateur Radio Clubs
    - Antennas– simple to extreme
    - Radio Sport (Contests)
      - Elmer Panel

For additional information please e-mail: [conference@sjra.org](mailto:conference@sjra.org)

To purchase tickets via PayPal: Send \$35 to [ebay@sjra.org](mailto:ebay@sjra.org) and write in your call sign and SJRA 2019 Radio Conference in the memo box.

## SJRA 2019 RADIO CONFERENCE Schedule

Start	Finish	Subject	Speakers
8:30	9:00	VE Testing Registration	
9:00	10:00	VE Testing	
10:00	10:15	Keynote Speaker	Ken, K2WB
10:15	10:45	I got my license and now what?	Holden, KD2JPV
10:45	11:15	Introduction to Modes of Operation Demo of all modes CW, SSB & DMR	Mario, N2AK & Tony, N2ATB
11:15	11:45	Test Equipment	Michael, KB1JEY
11:45	12:30	Lunch	
12:30	13:00	Clubs	ARRL- Jack, WB2ALI
13:00	13:30	Stations – Simple to Extreme	Jon, W2MC
13:30	14:00	Antennas- Simple antennas to get on the air	Owen, WA2WTF
14:00	14:30	My first QSO (Live Demo)	Ken, K2WB
14:30	15:00	QSLing- LOTW, eQSL, QSL Bureaus	John, W2HUV
15:00	15:30	Introductory to Radio Sport	John, W2FDJ
15:30	16:00	Satellite Communications for new hams	Joe, KC2TN
16:30	17:00	Elmer Panel	Ray, N3RG, Bob, KE2D & John, WY2J
<b>Drawing (related prizes at end of each talk)</b>			

Note: A Question & Answer session will be held in the breakout room after each presentation.

The Conference is an ARRL Sanctioned event hosted by the South Jersey Radio Association. Additional information about the SJRA can be found at: <https://sjra.org>



## SJRA Net News

Matt - N2IDW

The SJRA runs twice weekly nets on 6 & 2 meters with various modes.

Our Net Format is General Discussion with topics and comments selected by stations calling in.

Topics and comments respect all people and comply with FCC rules. Politics and Religion are discouraged.

Participation only requires a valid Amateur License.

## Net Schedules

**Monday night FM nets on K2AA repeater, 145.290 MHz, PL 91.5 Hz.**

1st Monday 8PM, Net Control: Dom, KD2EPM

2nd Monday 8PM, Net Control: Holden, KD2JPV

3rd Monday 8PM, Net Control: John, W2FDJ

4th Monday 8PM, Net Control: Matt, N2IDW

5th Monday 8PM, Net Control: Carl, W2CSH

**Thursday night Fusion nets on K2AA repeater 145.290 MHz DN mode AMS off.**

2nd Thursday 8PM, Net Control: Art, N2CPR

4th Thursday 8PM, Net Control: Roy, WB2EOD

**Thursday night SSB nets on 50.150 MHz USB and 144.260 MHz USB Voice**

1st Thursday 8PM, 6 Meters on 50.150 MHz USB. Horizontal Polarization  
Net Control: Matt, N2IDW

3rd Thursday 8PM, 2 Meters on 144.260 USB. Vertical Polarization  
Net Control: Matt, N2IDW

## SJRA NET RUNNING AVERAGES

Net Type	Avg. No. of Participants
2M FM Repeater- 1 <sup>st</sup> Mon.	10
2M FM Repeater-2 <sup>nd</sup> Mon.	9
2M FM Repeater- 3 <sup>rd</sup> Mon.	11
2M FM Repeater-4 <sup>th</sup> Mon. Swap Net	10
2M FM Repeater-5 <sup>th</sup> Mon.	10
6M 50.150 USB 1 <sup>st</sup> Thurs.	8
2M Fusion Repeater-2 <sup>nd</sup> Thurs.	11
2M 144.260 USB 3 <sup>rd</sup> Thurs.	6
2M Fusion Repeater-4 <sup>th</sup> Thurs.	11



### Items for Sale

Cushcraft Model A-3WS 3 element WARC bands beam antenna still in the box never opened.

I am asking \$350.00 for it. If interested please contact **Jack Froehlich, W2AF** at **856-809-2965** or **609-352-9696**. The antenna can be picked up at my residence in Atco, N.J. Thank you for your time.

TE Systems 1452G 2 meter all mode amplifier. This amp has a built in preamp and is in excellent shape. I used it to get started with EME operation and made a few contacts with it before upgrading. 10-25 watts in gives you about 350 watts out. Requires 13.8 vdc and 54 amp power supply. Comes with PTT cable and very heavy duty power cable. Email **Rick, W2JAZ** at [rjlawn@gmail.com](mailto:rjlawn@gmail.com)

### New Members

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

- Dean Gross, N2AWJ

### VE Report for Feb. 20, 2019

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

**David M. Wheeler, KD2RHH**  
26 Summerhill Lane  
Medford, NJ 08055  
Earned his Extra

**Mark A. Evangelitsa, KD2RLF**  
1120 Shamrock Way  
Williamstown, NJ 08094  
Earned his Tech

**Jeffrey J. Nalbone, KD2RLE**  
715 Tutor Lane  
Williamstown, NJ 08094  
Earned his Tech

**Matthew W. Rittman, KD2RLG**  
31 Westwood Ave  
Bridgeton, NJ 08034  
Earned his Tech

#### Total New or Upgrades to Date

Tech	General	Extra	Total
156	67	37	260

PRINTING • DIGITAL PRINTING • WIDE FORMAT OUTPUT • LAMINATION • MOUNTING • EMBROIDERY • SILK SCREENING

# PRINTING



**(856) 435-7320**

*Congratulations to South Jersey Radio on your Centennial*

9 Minnetonka Road • Hi-Nella, NJ 08083  
[printing@sandovalgraphics.com](mailto:printing@sandovalgraphics.com)



COMPLETE GRAPHIC DESIGN • HI-RES • PROMOTIONAL PRODUCTS • GREENING

FILM OUTPUT • OFFSET PRINTING

## Radio Sport aka Contests

John, W2FDJ, johnd152 at Verizon dot net

**Upcoming Contests** – see [arrl.org](http://arrl.org) or [contestcalendar.com](http://contestcalendar.com) for rules and more details. Daylight Savings Time is back on Sunday, March 10th so adjust accordingly for the weekly events after then.

### 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.)

**CQ WW WPX Contest SSB** 3/29-31 Fri.  
8PM EDT to Sun. 8PM HF; SSB

**144 Mhz Spring Sprint** 4/8 Mon. 7PM  
EDT to 11PM 2m; mode not specified.

### ARRL Rookie Roundup

4/14 Sun. 7PM EDT to 11PM HF + 6m  
SSB

### 222 Mhz Spring Sprint

4/16 Tue. 7PM EDT to 11PM 222Mhz;  
mode not specified.

**432 Mhz Spring Sprint** 4/24 Wed. 7PM  
EDT to 11PM 432Mhz; mode not specified

**Microwave Spring Sprint** 5/4 Sat. 8AM  
EDT to 2PM; Above 902Mhz; mode not  
specified.

*(Meeting Minutes Continued from page 3)*

Harmonics by Al, KD2ST- to include; conference notice, award winners list, article on digital o'scopes by Scott Holland, list of new members, VE report (including question pool change notice), swap shop list.

Contests by John, W2FDJ: 2-15/17 ARRL Int'l dx contest (CW); 2-21/22 CQ 160-meter contest (SSB); 3-1/3 ARRL int'l DX (SSB); 3-29/31 CQWW WPX (SSB).

Trustee- Very quiet.

Health & Welfare- Roy- WB2EOD; Feb cards out, March list to Harmonics.

Nets; Matt, N2IDW- Two swap nets so far- first well attended, second less so. He has broken down the net stats.

Programs- W2JAZ- Feb- White elephant; March- Flex Radio (SDR); April- AmSat; May- Storm robotics.

VE- Al, N3AVT 252 tested so far. He suggested the award of one year's dues to person passing #300. N3AVT/W2MC-passed.

Field day- 135 days.

Old business- Conference- committee meeting regularly, things going well. If all goes well, conference will make approximately \$500 for club. We need a minimum of 50 attendees to make this. We are now ARRL sanctioned.

New business; a fox hunt was suggested- will be considered. Jon, W2MC was appointed to head the nominating committee. Schedule- April- Committee slate & floor nominations; May- re-read complete list, take additional floor nominations. Voting if necessary, else recording secretary casts one vote if no opposition.

Submitted by Lou Priestley, N2HQL.

## If You Have Not Already Done So, It's Time to Renew Your SJRA Membership

Current dues are:

- \$30 Regular Member.
- \$22.50 for Seniors 65 years of age or older
- \$15 student.
- \$15 each additional family member.

Please include any updated information in the membership application form which can be accessed at: <https://sjra.org/sites/default/files/2018%20RENEWAL%20AND%20NEW%20MEMBER%20FORM%20updated%203%2014%202018.pdf>

Make check payable to South Jersey Radio Association and mail to:

Roy Herman, WB2EOD  
19 Bryce Road  
Voorhees, NJ 08043

SJRA also accepts PayPal. Please send money to [dues@sjra.org](mailto:dues@sjra.org)

Send as family and friends so PayPal takes no fee or include an extra \$1.

Any questions please email [<treasurer@sjra.org>](mailto:treasurer@sjra.org)

Tnx and 73,  
Roy Herman, WB2EOD  
Treasurer



## 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.

## 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.

## 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

### 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.

**March Meeting:****Is the Fourth Wednesday, March 27, 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 March:**

Our program for March is Flex Radio Systems SDR presentation by - Ria, N2RJ

**SJRA Member April Birthdays**

April Birthdays are: Betty Fletcher, KB2WDG; Jack Gordon, WA2RHJ and Scott Holland, NK2N

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

**April Meeting:****Is the Fourth Wednesday, April 24, 2019.****First Class Mail**

South Jersey Radio Association  
15 Pelham Road  
Marlton, NJ 08053

