



HARMONICS

1916

South Jersey Radio Association

2020



President's Message

Ken- K2WB

2020 is finally here, I like to wish everyone a very Happy and Healthy New Year.

Congratulations to all of the award winners of the SJRA awards this year.

I have compiled a list of Top 10 things to do in 2020. These are in no particular order.

- Check into the SJRA Nets (we have several).
- Help an older Member come to a meeting.
- Participate in a Club sponsored contest like November Sweeps or VHF Contests.
- Help a new ham get on the air.
- Help with Field Day.
- Volunteer for a committee.
- Show children or someone amateur radio.
- Encourage someone to join the SJRA.
- Make a suggestion to the Board of Directors.
- Write an Article for Harmonics or the web site.

Don't forget we are running a bus trip to the Dayton Hamvention. Sign up early or

contact John, KD2RKA for information.

Our treasurer, Roy WB2EOD has indicated that renewals have been coming in. If you have not renewed your membership please do so soon. Don't forget to update your information such as email address and mailing address so that you can continue to receive Harmonics.

Indicate if you want to stop receiving Harmonics by regular mail with your renewal.

The club has an email list that is a great way to reach out to all of the members of the club if you have a question or an item for sale. This service is only available to members of the SJRA and will be the only to receive harmonics by email. If we have your email address you will be receiving an email from sjra-members-resquest@mailman.qth.net inviting you to join the list or you can join directly by going to <http://mailman.qth.net/mailman/listinfo/sjra-members>. Remember to include your Callsign with your name.

To send an email to the list, just send it to sjra-members@mailman.qth.net and it will go to all of the members in the list automatically.

That is all I have for now,

73's de Ken K2WB

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 or from Art Arnold, N2CPR, Email: membership@sjra.org. SJRA's web page: www.sjra.org

SJRA VE Team: 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, KD2JVP
 Matt Grohans, 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
H&W: Roy Herman, WB2EOD; and Dara Herman, KC2THQ
Awards: **Vacant (Please Volunteer)**
Hospitality: Jean Priestley, KA2YKN
Nets: Matt Grohans, N2IDW
Publicity: John Johns, 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 Editor: 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	K2AA Repeater, PL: 91.5	145.290 @ 8PM
Fusion on 2 ND & 4 TH Thurs.	K2AA Repeater, DN mode	145.290 @ 8PM, Fusion
6M SSB on 1 st Thurs.		50.150 MHz USB @ 8PM
2M SSB on 3 RD Thurs.		144.260 MHz USB @ 8PM

Harmonics Deadline

Articles submitted for the next Harmonics will be accepted until Monday, February 10, 2020. Email: 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 December 4, 2019 BOD Meeting

Time: 1930

Facilitator: Ken, K2WB

In Attendance: Carl, W2CSH; Frank, AA2AW; Roy, WB2EOD; Art, N2CPR; John, KD2RKA; Ken, K2WB; Al, N3AVT; Tony, N2ATB; John, W2FDJ; Rick, W2JAZ, & Al, KD2ST

Board: Ken, K2WB called the meeting to order.

Approval of Minutes: The minutes of the November meeting will be approved on -line after revisions.

Treasurers Report: Roy, WB2EOD

The treasurers report was reviewed. There was a comment from Art, N2CPR concerning the format of the report in that redundant information was being presented that is not necessary. The amount received for deposits on the bus trip needed to be clarified. The treasurer will make the necessary changes. Ken made the motion to accept the report which was seconded by Art and carried.

Membership: Art, N2CPR

Art reported that one potential member (AB3LC) has submitted an application and deposit. His application is being processed. This brought up a discussion of the current membership application form. The form has undergone revision recently and the new format was discussed. The board ap-

proved the new form. Membership forms that are on the web site and on social media will be purged and the latest revision form made available on all sources. This latest revised form streamlines the process with a single form used for renewals and new memberships.

Correspondence Secretary: Dennis, AC2FO – No Report.

Harmonics: Al, KD2ST

Al reported that the December issue of harmonics will be extensive with Awards, results of the SJRA QSO Party and photos of Operating K2AA for the phone Sweepstakes. Al suggested that the general meeting minutes be put on the web site and a link to them be published in Harmonics. This would save publishing space in the mailed version for more interesting content. A motion was made to put the general meeting minutes on the web site in the members only section. This was seconded and approved.

Repeater Committee: No Report

History: No Report

Club Merch - No Report

Contests: - John, W2FDJ

John will distribute the contest list at the general meeting. The club QSO party went well but more up-front publicity will be put out in advance of next year's event.

(Continued on page 6)

2019 SJRA Holiday Party Group Photo



Limited Seating – Register Now!

2020 Hamvention Bus Trip South Jersey to Dayton, OH



**Only
\$150!**

Bus Fare and
Hamvention Ticket
(hotel separate)

Thursday, May 14 – Sunday, May 17, 2020
South Jersey Radio Association

Agenda includes
**The National Museum
of the US Airforce**
on Friday or Saturday
(Admission not included)



**Discounted
Hotel Rooms
Available**

The World's Largest Hamfest!

- Large
Outdoor
Flea Market
- Major
Prizes
- Free
License
Exams
- Dozens
of
Forums
- Special
Events
Station
- Inside
Exhibits

Email press@sjra.org for a registration form

2019 SJRA Awards Ceremony



Holden, KD2JPV; Dom, KD2EPM & Rick, W2JAZ

The SJRA Awards for 2019 were presented at the Holiday Party held on December 18th. We would like to congratulate the following recipients:

- **SJRA Youth Awards 2019:** Elle McCloskey and Logan McCloskey.
- **President's Award Outstanding Teenager- 2019:** Holden Correia-Fisher, KD2JPV.
- **E. Miles Brown Technical Merit Award:** John Hill, W2HUV.
- **SJRA Rookie of the Year:** John Jones, KD2RKA.
- **SJRA Harry W. Densham Award Amateur of the Year:** Dominic Sacca, KD2EPM
- **Gordon Kessel Award Cumulative Service Award:** Rick Lawn, W2JAZ.
- **VE Team Member Appreciation Award 2019:** Craig Hodsdon, WE2Q.

(Meeting Minutes Continued from page 3)

Health and Welfare: Roy, WB2EOD

Roy was asked to bring four cards to the general meeting for members to sign. These cards are for members and member spouses who could use a cheerful thought this season.

Nets: Matt, N2IDW – No Report

Awards: No new discussion

Programs: Rick, W2JAZ

Rick stated that programs are set through April of 2020 and that he is officially retired as program chairman. Art, N2CPR stated his appreciation for Rick's six years of service to the club. These thanks were unanimously put forth by the board.

K2AA Web Site: No Report

VE Team: Al, N3AVT

There will be no test dates scheduled for November and December. Al reported that he will be cleaning out and re-stocking the forms and handouts kept at the test location in preparation for the resumption of testing in January.

Publicity: John, KD2RKA

John suggested that there be a greeter assigned to each meeting to make visitors and new hams feel welcome at the meetings and to introduce them to the membership. Ken will put out the call for volunteers in his monthly President's message.

John introduced a current membership survey that is planned to be conducted this month. The board reviewed the survey. Suggested changes will be incorporated, and the survey conducted starting with the December meeting.

Property: Frank, AA2AW

The repeater site still needs to be inventoried. Ken volunteered to get access to the site over the Christmas holiday to survey the club equipment.

Old Business:

Roy, WB2EOD stated that there were four honorary memberships that are about to expire. After explaining the history and circumstances of the memberships, Al, N3AVT motioned that the honorary memberships be made permanent. This was seconded and approved.

A motion was made to keep the 2020 membership dues at the same cost. This was seconded and approved.

New Business:

Art, N2CPR made a motion that the board form a bylaws committee. The committee will address updates and revisions needed to the bylaws due to the evolving operating environment of the club. The bylaws have not been updated in some time.

Roy, WB2EOD reported to the board on the preliminary cost of procuring liability insurance for the club officers and board members in the performance of their duties. Roy was asked to submit the application and report back on the actual cost of the policy.

Roy has made the final 2020 budget available for review. This will be emailed to the board members for review and approved by email.

The meeting was adjourned at 22:10

Submitted by Carl Hyde, W2CSH

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.

ARRL 10 Meter Contest (was December 13-15th).

Name	#QSO'S	POINTS
John, W2FDJ	65	4,956
Dom, KD2EPM	10	228

Yes, I know 10 meters with no sun spots UGH! But was I surprised by three propagation events. For most of the contest all I was able to work was the normal PA, NY, CT stations on CW. At around 10PM Fri night there was a brief opening into MA, NH, NC and Canada. (probably Sporadic E).

And also, on Fri night I heard the sound of meteor scatter, which is when the received signal level becomes erratic becoming very strong for a second or less on and off. (sounds like your antenna connections have become intermittent) (Geminids Meteor Shower).

Finally, on Sat around 1-2PM there was a very unusual opening to Argentina, Chile, and Uruguay. (all around 5,300 miles from Cherry Hill). This was too far for Sporadic E so I went searching for how this was possible with zero sunspots. I found an explanation that I recommend you read. (Sporadic E

on both ends linked thru an F2 level duct)

Search for "2009 ARRL 10 Meter Contest Results" and you will find a great explanation of all these propagation modes written by Ken Harker, WM5R.

Upcoming Contests - see arrl.org or contestcalendar.com for rules and more details.

Every Tuesday only

Phone Frey 9:30-10pm. (yes 30 min) (ten weeks -4 times a year).

Every Wednesday only

CWops Mini-CWT test 8-9am, 2-3pm, 10-11pm (three one hr. sprints).

Every Thursday only

NCCC Sprint 9:30-10pm. (yes 30 min.).

Every Thursday only

NCCC RTTY Sprint 8:45-9:15pm. (30 min.).

North American QSO Party SSB: 1/18-19, Sat 1pm to 1am, Sun. HF. Mode: SSB

ARRL January VHF Contest: 1/18-19, Sat 2pm to 11pm Sun. 50Mhz and up. Any mode.

CQ WW RTTY WPX Contest: 2/7-9, Fri. 7pm EST to 7pm Sun. HF. Mode: RTTY.

ARRL School Club Roundup: 2/10-14, Mon. 8am EST to 7pm Fri. HF. Any mode.

ARRL International DX Contest: 2/14-16, Fri. 7pm EST to 7pm Sun. HF; CW

ARRL International DX Contest: 3/6-8, Fri. 7pm EST to 7pm Sun. HF; SSB

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SJRA Membership Renewal Begins January 1, 2020

This is just a brief reminder that DoozRdo on January 1, 2020. We've tried our best to make it convenient for you by going to the Club's website and following the instructions on the renewal form: <https://sjra.org/sites/default/files/2018%20RENEWAL%20AND%20NEW%20MEMBER%20FORM%20updated%203%2014%202018.pdf>

Several members have renewed so far so beat the rush and renew your membership today.



Thanks, Happy New Year and 73,

Roy Herman, WB2EOD
Treasurer, SJRA
19 Bryce Road
Voorhees, NJ 08043

(Radio Sport AKA Contests Continued from page 7)

CQ WW WPX Contest CW: 5/29-31, Fri 8PM EDT to 8PM Sun. HF; CW

ARRL Field Day: 6/27-28, Sat 2PM EDT to 5PM Sun. HF; All



SJRA Monthly Breakfast

Join us on the second Saturday every month at 9:30 am at the **Bob Evans Restaurant**; 601 Fellowship Rd, Mount Laurel, NJ 08054 for an informal get together.

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Everything Should Be Made as Simple as Possible, But Not Simpler

By Dan Romanchik, KB6NU

"Everything should be made as simple as possible, but not simpler" is a quote attributed to Albert Einstein (<https://quotationcelebration.wordpress.com/2017/01/07/everything-should-be-made-as-simple-as-possible-but-not-simpler-albert-einstein/comment-page-1/>). Here's one way to apply this principle in amateur radio, specifically to code practice oscillators.

A week ago, my friend, Paul emailed me:

"I am planning on teaching a two-hour introduction to Morse code to 14 girls ages 8 to 9 (*Paul's granddaughter is a Girl Scout.*) I plan on having the girls build a code practice device. I need your help in selecting a low-cost buzzer and battery holder. Please take a look around and see what you can find. I would like to limit the power to one or two AA batteries."

I replied that I'd be happy to help him with the demonstration, and offered the following advice:

"A while back, I built the QRPGuys' K7QO Code Practice Oscillator (<https://qrpguys.com/k7qo-code-practice-oscillator>). It uses a CR2032 coin battery.

"Unfortunately, they don't sell it anymore, but the assembly manual is still online (https://qrpguys.com/wp-content/uploads/2017/03/cpo_assy_012616.pdf). The assembly manual doesn't call out specific parts, but here are some Amazon SKUs:

- B00J4BK0NS, Black 3V Electromagnetic Type Piezo Buzzer, 20 pcs/\$6.58
- B06XF3K4NP, Coin Cell Button Battery Holder, 30 pcs/\$9
- B008SNZUYC, 3 Pin PCB Mount Female 3.5mm Stereo Jack, 10 pcs/\$5.40
- B071RMD6FD, 1/8" 3.5mm Stereo Male Connector, 10 pcs/\$7

"Batteries are available at the dollar store for about 30 cents each. So, you could do the whole thing for less than \$5 for sure, even with a printed circuit board, which I would suggest that we do. Heck, if you ask nicely, the QRPGuys might even give us the artwork, or even better, have some boards still in stock. Even if they have neither, you should be able to get the boards in plenty of time."

Later that day, Paul replied:

Thanks, Dan, for the information and making yourself available to help. I am just going to use a buzzer, key, and battery. The buzzer has a frequency of 400 Hz.

- <https://www.xump.com/science/Buzzer-Leads15V.cfm>
- <https://www.xump.com/science/ContactKeySwitch.cfm>
- <https://www.xump.com/science/Single-AA-Battery-Holder.cfm>

And this morning, he sent me this photo, noting, "FYI. Also sounds great."

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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.

January Meeting:**Is the Fourth Wednesday, January 22, 2020**

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 January:

The January program is a demonstration of coax connector installation and simple antenna building for new hams. Dennis, AC2FO is giving the presentation.

SJRA Member February Birthdays

February Birthdays are: Martin Conrad, WB2EHY; Bob Eboch Jr., W2RLE; Ted Groke, N8MP; Jack Imhof, N2VW; Shawn MacDonald, K2SMD; Leonard Warren, KD2FMV; Noah Weinstein, KC2YAT

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

February Meeting:**Is the Fourth Wednesday, February 26, 2020.****First Class Mail**

South Jersey Radio Association
15 Pelham Road
Marlton, NJ 08053

