



HARMONICS

1916

South Jersey Radio Association

2017



Upcoming Programs

It appears that there are no items to be auctioned at the SJRA club estate sale so we have decided to cancel that activity following the February business meeting. In lieu of the auction previously planned for the February meeting we will give the membership an opportunity to visit with one another about topics of mutual interest following the business meeting. At the last meeting the members present indicated a strong interest in occasionally using this "bull session" format in place of the usual guest speaker. With no estate items to auction, the February auction seems to be a logical meeting at which to try this format.

Prior to our refreshment break members in attendance will be asked if they would prefer a non-directed, more organic "bull session" with friends, or a more directed one with interest areas such as:

- ◆ Fusion, Wires-X, and DMR (Tony, N2ATB)
- ◆ Digital Mode operation and software (Matt, N2IDW)
- ◆ N1MM setup (Ken, K2WB)
- ◆ QRP Operation (?)
- ◆ SDR (Joe, KC2TN)
- ◆ Arduino & Raspberry Pi applications (?)
- ◆ Antenna design and construction (?)
- ◆ EME & Satellite Operation (Rick, W2JAZ & Ray, N3RG)
- ◆ Logging Software Options (Dennis, AC2FO)

- ◆ Contesting (Rich, KV2R)
- ◆ Operating your own station remotely (Joe, KC2TN)

Topics for discussion could easily be combined such as Contesting and N1MM setup. I have suggested several club members as discussion leaders of some topics based on their areas of expertise. If you consider yourself well informed about a particular topic please let Rick Lawn, W2JAZ, (rjlawn at gmail dot com) know.

The March program will consist of very short, no more than about 7 minutes, presentations of either video or still photo tours and narratives guiding us through SJRA member's stations. All that is needed is a hand full of photos, or a short video, that shows the hardware you use, your station layout and possibly your outside, or inside, antenna setup. If your station is relatively complex you might include a block diagram of how your gear is interconnected.

Please email Rick Lawn, W2JAZ, (rjlawn at gmail dot com) as soon as possible if you would like to participate in the March program as time allows for only about 7-8 presenters. We will of course provide a projector and laptop so all you need to bring is a key chain drive with your photos, movie or short PowerPoint Presentation. I've heard informally from a few SJRA members so please let Rick know ASAP if you would like to participate.

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@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
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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

 ★ 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> ★
 ★*****

LOCAL WEEKLY NETS

Monday	K2AA, Medford	145.290 @ 8PM
Fusion on 2 ND & 4 TH Thurs. and 10M on 3 RD Thurs.	Various Locations	28.405 @ 8PM 145.290 @ 8PM, Fusion

Harmonics Deadline

Articles submitted for the next Harmonics will be accepted until Monday, March 6, 2017. Email: 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

Minutes of Membership Meeting of Jan 25, 2017

The meeting opened at 1932 led by Jon, W2MC, who led the pledge of allegiance to our flag. We then introduced ourselves around the room for the benefit of our visitors.

The treasurer, Ray, N3RG made his year end report, highlighted by a current 49 paid up members, 8 from CCAP. WA2HJG/WB2EOD made a motion to accept, and that motion passed.

KD2ARD reported no new members, but acknowledged receiving an application from Bill Fisher KD2MPC.

Health & Welfare- Roy, WB2EOD reported birthday list to Harmonics, and several sympathy cards sent out. It was noted that Matt, N2IDW was hospitalized for appendix problems.

Programs- Rich, W2JAZ- Feb- estate items, : March - Magnetic Loop antennae by AC2FO; March- shack showoff night;

VE team, 192 new hams or upgrades. (Total exams passed).

Nets by WY2J- Nets doing well, the 10 M net will only be held monthly.

Dx by Jack, N2VW- FO/A Austral Island through 3 March: 9N Nepal- an Irish DXpedition group from March 8-20: A free DX report is available from [HTTP://www.DXHF.DARD.DE/mailman/listinfo/DXNL](http://www.DXHF.DARD.DE/mailman/listinfo/DXNL). Jack reports signup is easy.

Contesting, by John W2FDJ : 2/17,18,19 ARRL INTL DX CW: 2/25,26

North American QSO Party: 3/3,4,5 ARRL Intl DX SSB: 3/24,25 CQWW SSB WPX

Repeater by KC2TN - no problems reported. Club Stuff- no pending orders- He has some hats, no name on these- old logo=\$15, New (centennial logo) \$20.

It is getting close to election time: Volunteers for the nominating committee are needed.

Old business: What is status of the Centennial program books? They are in progress, some info (QSO results, etc.) need to be added.

No new business:

"oh by the way"s: W2JAZ discussed the possibility of having meet & greet (bull sessions) as a possible program subject.

The 50/50 was drawn before the break and white elephant sale.

Board Meeting of 1 Feb 2017

Meeting was called at 1930 by Ken, K2WB. Minutes of the January board meeting were approved as printed, motion by N2HQL/AC2FO. Treasurer's report was tabled (as in... on his kitchen table). He did state that we have to remind Centennial members of the conversion to regular membership.

New members: by KD2ARD & K3WWT: James Clark, KA2OSV and William Fisher KD2MPC. Accepted by the board on motion by N2HQL/WB2EOD.

Corresponding Secretary- AC2FO- need to finish thank you letters from cen-

(Continued on page 10)

Radio Sport aka Contests

John, W2FDJ, johnd152 at verizon dot net

Member's activities

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

The ARRL January VHF contest was a most active one for SJRA members. At least sixteen of our members were active by my knowledge. Thanks to Ken, K2WB, for taking a survey before the contest and building a spreadsheet showing the bands and modes SJRA members had available. I used mine to keep track of club contacts and slots worked.

I had the opportunity to log my very first contact on the 70cm band in 53 years a ham. Thanks to Art, N2CPR, for his patience as I logged this personal milestone. Also, thanks to Bob, N2SCJ, for letting club members know about his plans to work the contest exclusively on FM simplex. This might have been the first time I have checked this mode for a VHF contest. Because of that I had several contacts using 2mtr and 70cm in FM analog. Digital modes were also used by some members, Rick, W2JAZ, and Art, N2CPR, are two I know about. I used CW for a few contacts (that's digital on and off right?)

Other than Field Day this probably is SJRA's single largest contest participation. See the results that were filed below for this contest.

If you didn't file your VHF contest yet with ARRL you may have a few more days depending on when you read this. Deadline is Tuesday, Feb 21 by 10:59PM EST.

Art, N2CPR, recommends we publish in advance frequencies where club members could be more easily found. The rules for these contests allow many varied forms of assistance including self spotting. I notice

some clubs referred to local spotting assistance. Let's explore doing whatever we legally can to assist each other in the June VHF contest.

More on CW Practice Programs

Don, KD2EPM, recommended members take a look at the AA9PW.com website for a Morse code practice program. They have an app for I-phones and request a donation.

I used to use Morserunner, which simulated real contest situations like QRM, QSB, QRN. I checked and this program is still available for download, but it may not work on current Windows programs. They only list it working up to Win XP, so if you have an older computer available try it.

Recent posted results - see arrl.org or CQ

Please send me your summary sheet so I will be able to list your claimed score. John/W2FDJ.

ARRL 2017 January VHF Contest (10 logs filed)

Paul, KF2Y, 167 QSO's 4,326 points
 Dara, KC2THQ, 166 QSO's 4,305 points
 Roy, WB2EOD, 166 QSO's 4,305 points
 Bob, N2SCJ, 158 QSO's 1,998 points
 Rick, W2JAZ, 94 QSO's 1,512 points
 John, W2FDJ, 84 QSO's 1,157 points
 Mark, KD2JPW, 45 QSO's 510 points
 Art, N2CPR, 30 QSO's ? points
 Bob, KE2D, ? QSO's ? points
 Holden, KD2JPV, ? QSO's ? points

And, I found out why I didn't hear Ken, K2WB, locally, he was out West doing 15 QSO's 108 points for Superstition ARC as a rover.

(Continued on page 5)

(Radio Sport aka Contests from page 4)

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

ARRL International DX Contest CW
2/17-19, Fri 7PM EST to Sun 7PM

North American QSO Party RTTY
2/25-26, Sat 1PM EST to Sun 1AM

ARRL International DX Contest SSB
3/3-5, Fri 7PM EST to Sun 7PM

CQ WW SSB WPX Contest 3/24-26, Fri
8PM EDT to Sun 8PM



If you have never done the upcoming ARRL International DX contest CW week-end (starts Feb 17, 7PM EST) there are a few things to watch out for. For hams in the lower 48 States or Canada you will send a signal report and your state or province. However from DX stations, which include Alaska and Hawaii, you will receive a signal report and their output power in watts. This is where it can get a little tricky to copy. Many DX'ers will use CUT numbers sending their power and signal report as follows

- ◆ The letter A for the number 1
- ◆ The letter N for the number 9

- ◆ The letter T for the number 0
- ◆ The letter K or KW for kilowatt

So a dx station may send you 5NN ATT which means 599 100 another may send you 5NN NN which means 599 99 and yes they are free to send any power level they are running so expect all different numbers (99, 100, 200, 400, k, kw etc) and sometimes odd numbers. Lastly and most likely you will hear 5NN K which means 599 kilowatt.

Another rule to watch out for is you are only allowed 6 band changes in a clock hour which runs from 00-59 minutes, so a change from 20 to 40 for one contact and back to 20 for the next counts as two band changes.

This is one of the oldest continuous contests having started in 1929 (per ARRL). The DX stations can only work US/VE stations for points so they are really seeking YOU out!

There are lots of options for your entry class. Check out the detailed rules on ARRL.org



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Location Location Location! “Activity Breeds Activity”

This story begins in the January VHF Contest 2014 with a Kenwood HT. I was going to be in Fairfield California for the contest. Knowing this I packed my trustee 5W HT to see what I could get on 2m from the 5th floor of the hotel. It did not bear the fruit I expected but I was able to make 5 contacts in 2 grids.

To make the contact I had to wait out a church net (yes on simplex) to get my contacts. As soon as the net disbanded I immediately jumped in and called the call signs I heard. I was the first “outsider” they spoke to the radio. To their credit they all got their licenses to be prepared when the normal communications stops.

“Elmer on the air”, I explained the art of Radio Sport and what Maiden Head grid squares were, I was able to make contacts with each. After I finished I suggested they find a Field Day operation and meet more hams, which they thought was a good idea.

This experience planted a seed. I should be able to do this anywhere, perhaps better.

January 2015 I was home and then was away for the January 2016 contest.

This time I improved my travel station, same HT but I made a 5/8 wave 300 ohm ribbon J-Pole antenna. I scanned the 2m FM band from 144 MHz to 148 MHz and could not find anyone. I could not reach or hear the local repeater. After a couple of hours of frustration I gave up. That was my first contest in Arizona and I produced a zero score.

Nowhere to go but up!

Until about a month before the 2017 contest it looked like I was going to be home

for the January VHF contest. But that plan was short lived I had to be back in Arizona for the contest and this year I was not going to settle for a zero score again.

I got a FT-991 radio, so that I would have C4FM available if I got the chance to connect to a node. I already have a 4 element 2m Arrow antenna. Six Meters was going to be a problem, my initial thought was a wire dipole antenna that I could string between the Saguaro. I abandoned that plan and got the idea to by two telescoping antennas. DX Engineering had just the ticket. Armed with the new radio, antennas and camera tripods I went off to Arizona.

I have a friend in Mesa let me borrow a 12V DC Power Supply and I was set. Between battery clamps to run the radio when I was outside and the power supply for my Hotel Room I was good to go.

TIP: Don't leave your antennas assembled in the room. It scares housekeeping.

I arrived and got the power supply and testing the station a couple of days before the contest. During my research I discovered that most of the station on C4FM were on 440 MHz I did not have an antenna for 440 MHz but... There is a Ham Radio toy store in Phoenix so I drove to it.

Not have parental supervision I ended up with a 5 element 440 MHz Arrow and a really small 30A PowerWerks Power supply. I met another Ham in the store and offered a lot of advice. “Most stations are FM not SSB and the worst part is that they not very active in contesting.”

Nothing will stand in the way of my enthusiasm I started executing my plan of operation around my work schedule at the customer's factory.

(Continued on page 7)

(Activity Breeds Activity from page 6)

Further testing of the equipment exposed the fact that I was computer logging and my computer battery lasts about 2 hours. Not a good situation to be in. The next solution to the problem is how to get 120V to run the computer quickly and in the desert. As luck would have it there was a Harbor Freight in town where I am staying. My first plan was to get one of those 900W small generators and give it to a friend to store for me in Arizona. As I was shopping I found a small 800W Invertor with Battery Clips (problem solved). Now I was ready.

I wire tied the 440 Beam to the 2m Beam. Both antennas seemed to work ok. I was able to bring up repeaters on 2m and 75cm 30 to 40 miles away.

Now for the research before the contest:

Last Year 2016 results.

SNJ had 22 entries and EPA had 82 last year for comparison.

The results in the excerpt indicate that there is a population of hams in Arizona that don't submit logs.

Saturday I had to work late in the customers facility. I forgot the contest started at 12:00 hours MST (14:00 EST). So I missed the first 6 hours of the contest. Sadly I was told is usually the most productive out in Arizona. Still I pressed on to call CQ on 6 meters from my hotel room. After spotting myself in DM32 I got my first contact. On Sunday I moved to DM43 on a rise that gave an unobstructed view of Phoenix to the West.

When all was done I managed 15 QSO's and 6 grids. With being a rover I managed to get 144 points. Based on last year's results I may be in the running for the top 10 in Arizona.

The lesson is that all locations are not equal. Fortunately we live in the east coast with a good population of hams that are active in the January contest. Interestingly based on the QRZ 2004 Ham population census I come up with this interesting statistic of % of hams submitting a log in the January contest.

Considering the activity, I had a ton of fun planning and executing my operation plan, and I would do it again next year.

No.	Call	Score	QSO's	Mult	Class	Section	Grids	Club	Ops
1	W7QQ/R	8,399	119	37	R	AZ	9		(+KK6MC)
2	WA7JTM	510	41	10	Q	AZ			
3	N7RK	297	28	9	3B	AZ		Arizona Outlaws Contest Club	
4	W7ON	279	25	9	3B	AZ		Arizona Outlaws Contest Club	
5	K0KFC	192	6	4	A	AZ			
6	N7NEV	55	10	5	3B	AZ			
7	K7RJ	48	2	3	A	AZ			
8	KC7V	4	2	2	A	AZ		Arizona Outlaws Contest Club	
9	W0PAN	3	3	1	A	AZ		Arizona Outlaws Contest Club	

This is an excerpt from the 2016 ARRL January VHF Contest Database

(Continued on page 9)

President's Message

Ken – K2WB

If the snow or freezing rain damages your antennas, wait for better weather to repair. No reason to be a hero, there are no rewards or prizes in getting hurt. Please be careful and think safety at all times.

Check on neighbors, friends and the elderly during inclement and cold weather.

Now is a good time to get more involved with your radio club. Ray, N3RG, is heading up the nominating committee. It would be great to have a new involvement in the operations of your radio club. Contact Ray if you are interested in serving. We are also looking for help with some of the aspects of the operation of the club, membership, History and Harmonics and other areas of the club. I urge you to share your talents with the club.

A number of members participated in the January VHF contest, I hope it was as much fun for you as it was for me. Make certain that you have sent your logs into the ARRL and copied John, W2FDJ.

Field Day will be here 142 days, now is a good time to start planning. Contact me if you have any questions or would like to help.

SJRA Elections Coming Up – Is This Your Year to Run?


SJRA will hold its biennial election at the May general meeting, but already Ray N3RG and his nominating committee are beating the bushes for new candidates for the board of directors and to fill spots among the club officers. A slate of candidates must constitutionally be provided at the April meeting, at which time nominations are also accepted from the membership. To be nominated a person only needs to state his willingness to serve in the post; candidates for president must have served on the board for one term. Several club officers and board members have already served many years in their positions, so that there is a need for new candidates. Certainly the board is looking forward to welcoming some new faces to the group in June 2017.

If you would like to nominate someone, first obtain the person's agreement to serve and then contact Ray, N3RG, (rgolley *at* comcast *dot* net). If you would like to be nominated, find a nominator or just call Ray who will gladly find someone to nominate you. New nominees either will be placed directly on the slate, or they may be listed in April as alternative candidates along with any nominated at the April meeting.

The current board of directors consists of Al, N3AVT; Ira, W2IRA; Rick, W2JAZ; Rich, KV2R; Roy, WB2EOD; Ted, KD2ARD; and Tony, N2ABT. The officers are Ken K2WB, president; Jon W2MC, vice president; Ray N3RG, treasurer; Lou N2HQL, recording secretary; and Dennis AC2FO, corresponding secretary.

Rich, KV2R

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FOR SALE

When the weather warms up I plan to replace my single M2 9 element yagi with 2 InnovaAntennas. My M2 2M9SSB/FM yagi is available for \$100 or best offer. It is in very good shape and you can read the specs here: <http://www.m2inc.com/amateur/2m9ssb-fm/>

I have both element sets to cover either the lower band segment for SSB/CW/Digital activity or the higher FM portion of the band (vertical polarization). The antenna can therefore be mounted as a vertically or horizontally polarized yagi. The boom is about 14.5' long.

Contact Rick, W2JAZ: [rjlawn at gmail dot com](mailto:rjlawn@gmail.com) or give me a call at 856-429-3539.

FOR SALE

Two used Astron RS-7A linear power supplies. I measured the output voltage at 13.8 VDC, and they have a rating of 5A continuous and 7A peak. Both are clean and in good shape. I'm in Medford and can either meet buyer(s) locally or meet at an SJRA meeting. The street price for these is about \$72 new, but I'm selling them for \$30 each or \$50 for the pair. Email if interested: [bob at applegate dot org](mailto:bob@aplegate.org)

Bob, K2UT

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

Email Ted, W2TAG, with your listing, [ted.w2tag at gmail dot com](mailto:ted.w2tag@gmail.com)

(Activity Breeds Activity from page 7)

State	No. of Ham Operators	No. of Logs Submitted	Percent Submitted
AZ	15744	9	0.057
PA	24034	82	0.341
NJ	14908	24	0.161

Thinking of this the June Contest is only 120 days away. Now is the time to start planning.

73's, Ken K2WB/7



K2WB-R Operating Position



Antenna with Superstition Mountains in background

(Meeting Minutes from page 3)

ennial. Also we need to pick up antenna from Mike Slepian.

Repeater: KC2TN- working. Getting a dongle (DV4mini) to attempt to get us tied from Wires x to regular internet.

Contests- Logs to be submitted using SJ Radio Assn.

History- Mark- worked on web page.

Trustee- no OO cards.

Club stuff- some hats on order, tee shirts left over.

H & W- Birthday list to Harmonics, Matt N2IDW recovering.

Programs- W2JAZ: Feb- Estate Sale/ Bull Session: March: Station tours: April AC2FO- magnetic Loop Antennae: May- Storm robotics, FD warmup: Jun- FD Wrap

VE- 192 passed tests so far. Need additional volunteers to keep team going.

Web training- Webex training will be available.

Centennial- Still a few loose ends to finish up.

FD- 142 days

Old Business: Ray, N3RG to head nominating committee. Floor nominations- can't nominate yourself, and any nominations must be approved by the nominee.

New: W2JAZ- can we get presenters to do short write up of their program to put in Harmonics.



SJRA Membership Renewal Begins January 1st, 2017.

This is just a brief reminder that DoozRdo on January 1, 2017. 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.

<http://www.sjra.org/sites/default/files/2015%20Renewal.pdf>

Thanks, Happy New Year and 73,

Ray Golley - N3RG

Treasurer, SJRA

552 Newport Rd

Millville, NJ 08332-7821

Items for Sale

Flex 1500 SDR (5watt) Transceiver- with PowerSDR on CD, FHM-2 Microphone, USB connection cable, and Flex Control USB – \$550.00

MFJ 986 3KW roller antenna tuner with lighted cross needle meter – \$200.00

Yaesu FT101ZD Transceiver, which is a working vintage radio, with tube finals, digital readout, and microphone - \$100.00

Paul Hayden, KF2Y
856-448-3328

Please Note!

The **Test Session Report for February 14, 2017** will be published in the March 2017 issue of Harmonics.

ed. W2TAG

SJRA Jackets, Shirts, Hats

Order NOW - Next order going in soon!



Spring Jacket is \$44 (S,M,L,XL), Fall Jacket is \$55 (S,M,L,XL),
Shirts are \$27 (S,M,L,XL), Hats are \$20 (*New Lower Price*, 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 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.

February Meeting:

Is the **Fourth** Wednesday, February 22, 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 February:

Visit with one another about topics of mutual interest.

SJRA Member March Birthdays

Howard Bates, KC2SNK; Chris Cannatella, KC2GNQ; Francis (Tony) Canuso, N2ATB; Albert Kaiser, W3LEQ; Gary Triplo, KD2EBX; Philip Webber, KA2SZV; and Ira Weinstein, W2IRA.

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

March Meeting:

Is the **Fourth** Wednesday, March 22, 2017

First Class Mail

South Jersey Radio Association
PO Box 1026
Haddonfield, NJ 08033

