



HARMONICS

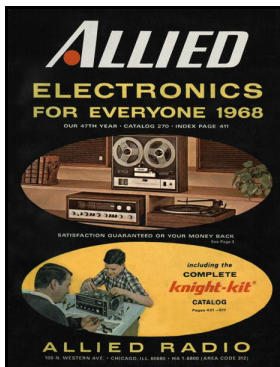
1916 South Jersey Radio Association 2017



Catalogs Are About Possibilities

Dan, KB6NU, cwgeek at kb6nu dot com

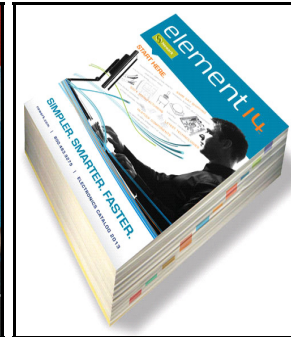
When I was a kid, I used to regularly get catalogs, such as the Allied Radio and Lafayette Radio catalogs shown below, and pore over them for hours. Even if I couldn't afford to buy the latest Knight-Kit or Lafayette shortwave radio, I could imagine what it would be like. These catalogs were chock full of possibilities.



I spent many hours poring over the Allied and Lafayette catalogs as a kid. These two are from 1968, when I was 13 years old.

So, you can imagine how I felt when, last Thursday, I found both the Autumn/Winter 2017 DX Engineering catalog and the 2018-2019 Newark Electronics/element14 catalog in my mailbox.

DX Engineering has really taken the amateur radio world by storm over the last



ten years or so. I probably don't have to tell you about that. If you're an active amateur radio operator, I'm sure that you have heard about—and probably ordered from—DX Engineering.

I think that DX Engineering did a very smart thing by investing the money in a print catalog. There's something about browsing a print catalog that is just more satisfying than browsing online.

DX Engineering has just about everything you need to have fun with amateur radio. The one glaring omission? They still don't carry my study guides!

The Newark/element14 2018-2019 catalog is a completely different beast. Amateur radio operators are only a small part of Newark/element14's market, but one nonetheless. They have, for example, attended the Dayton Hamvention for many years.

(Continued on page 4)

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
Vice Pres.: Jon MacMillan, W2MC
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Cor. Sec: Dennis Cioffi, AC2FO

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 Rick Lawn, W2JAZ
 John Doran, W2FDJ
 Tony Canuso, N2ATB
 Burton Sampley, NJ2IT
 Al Witner, N3AVT

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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 MacMillan, W2MC
Web Site: Ira Weinstein, W2IRA

Harmonics Staff:

Publisher/Editor: Ted Groke, W2TAG
Alternate Editor: Rick Stoneking, W2RDS
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/sections/?sect=SNJ> ★
 ★*****

LOCAL WEEKLY NETS

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

Harmonics Deadline

Articles submitted for the next Harmonics will be accepted until Monday, December 11, 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

Membership Meeting of Oct 25, 2017

The meeting was opened at 1925 by Jon, W2MC, with a flag salute. The meeting was held at the Gibson House. The question of the evening was "Who will be on the CQWW phone contest this weekend?".

Roy, WB2EOD made the treasurer's report. The minutes of the September meeting were approved as printed, motion by NJ2IT/WB2EOD (they were taken by NJ2IT).

Corresponding Secretary Dennis, AC2FO reported we received regrets from the White House since they couldn't process our invitation until after the event (field day).

Programs by W2JAZ- Tonight- Mag loop antennas: November- KV2R reports on the eclipse: December- Party.

Awards by W2JAZ: It's time to get nominations in.

VE- 8 tested in October

Nets- WY2J ; most interest seems to be in the Fusion Nets, A digital net will be tried on 144.27. Matt, N2IDW explained the procedure, and recommends use of FLDGI as software.

DX by N2VW: 3W- Vietnam; as a continuation of KC0W's tour (1-15 Nov in Brunei) then 17-30 November as 3W/KC0W in Vietnam.: YJ; Vanvatu 15-20 November YJ0JA.

Repeater, by KC2TN; the node went down, and lost settings. They were

changed and the node reset. Club Stuff- Still taking orders. Remember, Christmas is coming.

No old, new or "by the ways" Jon W2MC called a recess until the presentation.

Dennis AC2FO gave an interesting presentation on Magnetic Loop Antennas

Board of Directors 11/1/2017

The meeting, held at the Gibson House was opened at 1908 by Ken, K2WB.

Minutes of the October meeting were approved as printed in Harmonics- Motion N1HQL/WB2EOD. W2JAZ remarked that it did not seem right to approve minutes that had already been printed. It was decided that the BOD minutes would be released to BOD members before submission to Harmonics.

Roy, WB2EOD made a detailed treasurer's report (available to the membership on request), showing 123 paid members.

Membership, by K3WWT (via webex) reported that he has not been getting any information for several months. Discussion ensued, Ken K2WB to formalize handling of applications & present to the board. Roy, WB2EOD read names from applications in his possession: Martin Poulson KF4EUV and Lynda Spitz (N/C) were approved. All other applications would be passed through the system, as established.

Corresponding Secretary, AC2FO, reported one inquiry regarding visit to a club meeting and whether teenagers were

(Continued on page 9)

(Catalogs Are About Possibilities from page 1)

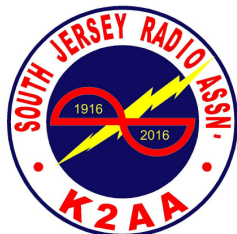
As such, the catalog is not a “ham radio” catalog, but if you build stuff at all you’ll find something of interest in its 1,799 pages. It includes nearly any kind of electronic part that you might need.

The section that might you might want to start with is the “makerspace” section. In this section, you’ll find Raspberry Pis, BeagleBones, and even micro:bits. They really have everything, though, including passive and active components, connectors, cable, and enclosures.

Like I say, these catalogs are all about possibilities. You can search each company’s website and find the parts they carry quickly and easily, but that experience is just not the same as browsing a print catalog and daydreaming about what you might find there.

So, get your own copies—they’re free—and page through them. I’d be surprised if you didn’t run across something that you didn’t know about before, and it gave you some ideas about your next amateur radio project.

Dan, KB6NU, is the author of the “No Nonsense” amateur radio license study guides and blogs about amateur radio at KB6NU.Com. When he’s not browsing through catalogs, he teaches ham radio classes and operates CW on the HF bands. You can email him at cwgeek@kb6nu.com.



Award Nominations Please!

It’s not too early to be thinking about SJRA awards given out annually at the December Holiday dinner party. Each year SJRA recognizes significant accomplishments of its members by presenting three prestigious awards. These awards are as follows:

- ◆ **Miles Brown Award for Technical Merit**
- ◆ **Harry Densham Amateur of the Year Award**
- ◆ **Gordon Kressel Long Term Service Award**

These awards bring distinction and recognition to deserving amateur radio operators for their exceptional contributions to the hobby and the SJRA. The SJRA website has more information about these awards and past recipients.

A *Nominate Button* on the Awards section of the SJRA website is designed to allow members to easily submit nominations online. Online nominations are sent directly to Rick Lawn, W2JAZ. Alternatively, you can submit your written nominations to any board member; or use the nomination form that will be emailed to the entire membership. Your nominations need not be lengthy and can also be emailed to me Rick: rjlawn *at* gmail *dot* com or mailed to my home address: 1021 Owl Lane, Cherry Hill, NJ 08003. The deadline to submit nominations this year is November 22, which is the last general meeting before the holiday party where awards are made.

Rick Lawn, W2JAZ
SJRA Programs and Awards Chairman

President's Message

Ken – K2WB

Our Holiday Party (December 20th) the meeting and meal will be held at the Gibson house. After dinner there will be presentation of the club awards.

Please contact Rich, W2JAZ, regarding nominations for Awards, the sooner the better. When doing so give a reason for your nomination and for which award that you recommend. Award information is found on the SJRA web page at www.sjra.org.

By the time Harmonics comes out the November Sweepstakes CW portion of the contest will be completed. As far I know that Bob, KE2D, and John, W2FDJ, participated let John W2FJD and myself know if you entered the contest. There is still a chance for you to sign up to operate the Single Side Band part of the contest with the K2AA station, contact me if you are interested in getting in the K2AA operating schedule. If you operated either or both contests send a copy of your summary sheet to John, W2FDJ,. Don't forget to list the South Jersey Radio Assn as your affiliated club.

Usually the results of Field Day are out by now. As of the writing of my column the ARRL has not published the results keep your fingers crossed. Field Day 2018 planning as already started. Think of what you can do to help.

There is still time to let John, W2FDJ, know if you participated in other contest, let him know.

Don't forget that the meeting is on the 3rd Wednesday (November 15th) this month.

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

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

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What Is UAFBAF?

UAFBAF is an acronym for Up As Friends, Back As Friends. This is the foundation of the South Jersey Mountain Toppers ARC (aka SJMT, aka W2EA).

Why is this important? What we do in the September VHF contest is supposed to be fun. Getting along is very important to the harmony of the operation. No one wants to go away for a weekend and come back miserable.

This year (2017) was no exception, as in any multi-op portable operation with 15 people there are a lot of personalities to deal with. With exhaustion, even a sarcastic remark may be taking the wrong way. We had our problems, but overcame them as a group. And yes, we came back as friends.

Our biggest issue was where to put the microwaves (903 MHz and Up). The SJMT group plans as much as possible in detail. Our site has a number of obstacles to thread antennas and towers through, we have to know where things are going before we get there. Since the September VHF contest in 2016, Bob, W2SJ, and his friend Roger, W3SZ, have been trying to understand why we could not work stations 3 GHz and up to the South. With Roger's help and insight, a plan was formulated and now it was time to put theory into reality.

When the group arrived on the summit, time was lost relocating the tower from the planned location. There by creating a minor infringement to the Second Commandment to Mountain Top Contesting, regarding changing the plan and final location was determined.

Having the microwave on top of an AB-577 tower put the antennas 50 feet above the ground. Our work paid off and we were



This photograph shows the 222 MHz and 432 MHz antennas at 50 feet on the AB-577.

able to work stations in the Philadelphia area above 3 Ghz.

Our UHF station had only two bands 222 MHz and 432 MHz, both have long M2 antennas with 33-foot booms. Again, these were put at 50 feet and at the top of another AB-577 tower. This configuration has served us well for many years.

The 6 meter and 2 meter antennas were put on separate towers. Again with M2 antennas, 7 elements on 6 meters and 18 elements on 2 meters. The 2 meter antenna has a couple of tricks up its sleeve.



Elevation mechanism for the 2 meter antenna, which was used for the EME try.

(Continued on page 7)

(What Is UAFBAF? from page 6)

It was our intention to try for a 2 meter EME contact this year. So our 2 meter antenna was able to have the elevation adjust from 0 degrees to almost 70 degrees and the antenna could rotate from horizontal to vertical. Unfortunately, we never made that EME contact due to issues with the radio equipment.

Other than that, we accomplished what we planned to do. This includes setting up a world class contest station, added the ability to operate MSK144 and FT8. Our operations plan was solid and kept the equipment in operation around the clock.

In summary we made 663 contacts and 187 grids for a total of 191,144 points. Our digital effort paid dividends providing 19 MSK Meteor scatter and 15 FT8 contacts. Which also yielded an additional 20 grids.

Rovers made up almost 1/5 our contacts, Rovers are very important and planning in advance pays off. Credit for the



This photograph shows the microwave stack - 900Mhz - 10Ghz

rover planning goes to Bob, W2SJ and his friend Bill, K3EGE. Without this effort our score would have been lower. I would like to give thanks and kudos to all of the rovers and their efforts.

As a group we returned on Monday as Friends. And that is what Uafbaf is all about.

73's and UAFBAF!!

Ken, K2WB



This is the all-important group photograph (the real reason of going to FN21kh. From left to right K2WB, K3EGE, KC2TN, KB3SIG, N3AVT, W2TAG, K3HUW, KB1JEY, N3RG, W2SJ, KD2JPV, KE2D, KD2MPC, N2SCJ and N2UNI

Radio Sport aka Contests

John, W2FDJ, johnd152 *at* verizon *dot* net

Member's activities

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

CQ WW SSB (was Oct 28-29)

There are a few stories that I was following, first, Frank, AA2AW, was in the process for a few months of re-building a station, including installation of a tower with beam. (Frank has indicated he will do a brief write-up - look for that next month). But the great news is that he finished in time for the CQ WW SSB contest and made 70 contacts giving proof that the rebuilt system was functioning fine. Well done Frank!

Two SJRA members have filed scores with CQ WW naming SJRA as their club affiliation. They are Paul, KF2Y, and myself. I believe Frank, AA2AW, was also planning to file, but sadly missed the quick 5 day deadline. Only two summaries were received at contests *at* sjra *dot* org.

AA2AW, 70 contacts, 12,383 points

W2FDJ, 39 contacts, 4,851 points

Now the last club member I was following was Jack, N2VW. At the last club meeting John, W2MC, asked each of the attending members to introduce themselves and state whether they planned to participate in the CQ WW SSB. About a dozen members gave it thumbs up, but one response caught my ear. Jack, N2VW, said his goal was 1000 contacts and 1 million points. Now we all know Jack is a top level DX'er and Contester so I was curious how he would do. He did quite well at 624 contacts and a predicted score of 604,095. Well done Jack. During my search for members scores I looked on both CQ WW website and on

3830Scores.com Want to see some amazing past results from Jack or other members do a search on these two websites. Indeed in 2012 Jack, N2VW had a score of 1,016,160 so he knew it was absolutely possible.

ARRL 2017 SWEEPSTAKES (CW) (was Nov 4-5)

This contest just concluded and so not much to report yet. I did participate for about 15 hours and always enjoy the count-down to see if I can work all 83 sections. Not this year, I missed five sections, which even with hours to go I couldn't work. I have no idea how I missed NNY, SC, and AL sections. It was no surprise that the Virgin Islands and Puerto Rico were not to be found this year given the pounding the islands took. There was one PR station I could barely hear, but there was a giant pileup, which I had no chance of breaking thru. After entering about 40 Sweepstakes contests during my 56 years as a ham it was only in the last three years that I achieved a sweep.

I look to hear your stories about the next upcoming ARRL Sweeps and the CQ WW DX CW contests coming up in the next few weeks.

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: contests *at* sjra *dot* org.

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

Every Tuesday only, Phone Fray 10:30PM to 11PM (yes 30 minutes), (ten weeks -4 times a year)

Every Wednesday only, CWops Mini-CWT test 9 to 10AM, 3 to 4PM, 9 to 10PM, (three one hour sprints).

(Continued on page 10)

(Meeting Minutes from page 3)

welcome Dennis will respond to this request.

Repeaters by Joe KC2TN- Medford working well. A long discussion regarding the status of the Pine Hill machine was held. Discussion regarding other sites, availability of access and the future of the site due to planned expansion of the Building on the site were discussed. John, WY2J expressed feelings that there was some lack of attendance on nets due to coverage problems, and that as a minimum system, he would like to see the spare "Fusion" repeater installed at the Pine Hill site, with fusion capabilities and a link to the Medford repeater. Art, N2CPR asked if the spare needed to go to Yaesu for upgrades prior to use. Joe, KC2TN stated that the real need was to upgrade to a Version 2 repeater at a cost of approximately \$500.00. A motion by W2MC/AC2FO to do this upgrade as maintenance on the Pine Hill machine was passed. Ken, K2WB stated that as a "Capital Expense" the approval of the Membership was required. This approval would be requested at the November membership meeting.

Radio sports- John, W2FDJ- He and Ken are finishing work on the Club QSO party results. He also reported sending a list of expected operators to ARRL for the Nov Sweepstakes, with 6 digit location codes, and he thinks the list was accepted (this list is a new requirement from the ARRL, the shortened reporting time after contests is now also in effect).

Trustee- no report

Health & Welfare- no report- Dec Birthday list has been submitted.

(Continued on page 10)

Test Session Report for October 11, 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.)

Siddharth Desai, KD2OIK
36 Bond St
Bridgewater, NJ 08807
Earned his Tech

James R. Haney, JR, KD2OIL
701 Evergreen Blvd
Brownsmills, NJ 08015
Earned his Tech

Warren C. Knack, KD2OIM
40 Quail Hollow Drive
Westampton, NJ 08060
Earned his Tech

Nickolas E. Hartman, AC2WB
58 Village of Stoney Run
Maple Shade, NJ 08052
Earned his Extra (Passed all Three!)

Francis S. Key, WB2KKK
213 Irick Rd.
Westampton, NJ 08060
Earned his Extra

William Dreisbach, KB2MMI
2 Hill Ct.
Medford, NJ 08055
Earned his Extra

Vincent Kelly, KC2MSY
68 Morris Dr.
Sicklerville, NJ 08081
Earned his Extra

	Tech	General	Extra	Total
To Date	131	56	33	220

(Radio Sport aka Contests page 8)

Every Thursday only, NCCC Sprint 10:30PM-11PM (yes 30 minutes).

ARRL Sweepstakes Phone, November 18, 19, 20, Saturday 4PM EST (24 of 30 hours) to Sunday 10PM EST.

CQ WW DX Contest, CW, November 24 and 25, Friday 7 PM EST (48 hours).

ARRL 160-Meter Contest, CW, December 1 and 2, Friday 5PM EST to Sunday 11AM.

ARRL 10 Meter Contest (Phone and CW), December 8 and 9, Friday 7PM EST (36 of 48 hours).

ARRL Rookie Roundup, CW, December 17, Sunday 1PM EST to 7PM EST.

ARRL RTTY Roundup, RTTY Digital, January 6 and 7, Saturday 1PM EST to Sunday 7PM.

North American QSO Party, CW, January 13 and 14, Saturday 1PM EST to Sunday 1AM.

North American QSO Party, Phone, January 20 and 21, Saturday 1PM EST to Sunday 1AM.

ARRL January VHF Contest, any mode, January 20 and 21, Saturday 2PM EST to Sunday 11PM

(Meeting Minutes from page 9)

Awards- no nominations received to date.

Programs- Nov- KV2R reports on experiencing the eclipse. Dec- Party. (Note these meetings are held on the third Wednesday.

VE- 8 people tested last session, 7 passed.

Old Business: Budget; motion to table due to late hour was made by NJ2IT/AC2FO- motion passed. Adjournment at 2125

Minutes by Lou, N2HQL,
SJRA Rec. Sec.

SJRA Membership Renewal Begins January 1st, 2018.

This is just a brief reminder that DoozRdo on January 1, 2018. 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>

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 Rd
Voorhees, NJ 08043



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 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 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.

November Meeting:

Is the **third** Wednesday, November 15, 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 November:

Rich VonLintig, KV2R, is our presenter for the November meeting and he will be telling is about his experience viewing the recent August total Eclipse.

SJRA Member December Birthdays

Stephen Sullivan, KZ2I; David Soll, KC2YJI; Dara Herman, KC2THQ; Ray Golley, N3RG; and Edward C. Fletcher, N2ZPR.

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

December Meeting:

Is the **Third** Wednesday, December 20, 2017

First Class Mail

South Jersey Radio Association
PO Box 1026
Haddonfield, NJ 08033

