



The Radio Hill Gazette

A publication of the Schaumburg Ham Radio Club (SARC)
September 2017

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From the Editor

Hello to all, September is almost over and I think it was hotter than in July, and it's been a rather destructive September for many areas of the world with Hurricanes and earth quakes. The destruction in Puerto Rico seems to be coming to a humanitarian crisis with power out to almost the entire island, limited water and food supplies and infrastructure nearly all destroyed. I recently read on the ARRL website that they were requesting HAMS to help assist the American Red Cross with outbound health and wellbeing checks. It's times like this, that remind me of the importance of emergency communications and how HAMS have the tools training and experience in handling these types of situations.

I was curious about some of the requirements that the ARRL was looking for in volunteers to send to Puerto Rico. They were looking for amateurs with the typical HF voice and VHF simplex experience, but one that caught my eye was experience with Winlink. For those that aren't familiar with Winlink, it's basically an application that allows the ability to send and receive email communications over HF radio. Earlier in the year I actually tried it out to learn how to use it, and I think any of us with the means of portable operations should learn it as well. Now I'm no prepper, but you never know when you might find yourself in a situation needing to send or receive detailed messages in an emergency. You can find out more from www.winlink.org.

So I realize many of us probably never consider operating in portable conditions, maybe we haven't the means or equipment, but gaining knowledge of these tools could be beneficial.

Mike K9KQX

From the President

I'd like to remind everyone in the club that we run two formal nets, in addition to a lively weekday morning informal roundtable on our repeater. Thursday night at 8pm is the information net which was updated earlier this year. Some of the "usual business" has been streamlined, and a new section has been added for reviews. The reviews section has had many good suggestions for movies, books, web pages and similar things that are of interest to us as hams. It even includes the occasional bit about new restaurants in the area. Also, when applicable net control will announce upcoming operating events such as special events and contests. The special events can be a fun way to collect unique QSO cards. I'm quite fond of the Route 66 on the air cards I picked up last year and look forward to seeing some of the ones that come in from this year's event. Finally, every check in to the Thursday net get you an entry in the club raffle for ham radio related prizes. The next drawing will be at the Christmas party in January. At the last drawing we gave away a SARC T-Shirt, a \$25 ARRL gift card and a 20m dipole. Make sure you join us on Thursdays.

On Tuesday at 7:30 Leo N9NBH runs Tech Net. It's a slightly less formal net so get on the air and ask technical questions of other members. Or, ask some questions about that license upgrade exam that your studying for. From time to time there will be a theme for the net, and it may stretch over more than one week. Recently we had some discussions of antenna modeling software and digital modes. Don't forget, you may have an answer to a question that comes up. You won't know unless you check in.

Finally, I'd like to thank everyone who helped this month with the cleaning out of the construction project area. I'd especially like to thank everyone who took a good portion of their weekends to bring the gear over to local hamfests and sell the stuff on behalf of our club. We took in just over \$400 in the endeavor. And we cleared out some space in our storage cabinets so we can begin working on some new projects.

Matt
AC9IGMatt

AC9IG

The Radio Hill Gazette, newsletter of the Schaumburg Amateur Radio Club
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Construction Project

Gary N9VU:

Next CP meeting will be Saturday, October 14th from 8am till noon.

Location is at the Schaumburg Tennis Plus, 1416 Payne Rd, Schaumburg, IL

Bring your kits, bring your radio repair projects, or just bring yourself. We might be able to pick your mind to help another with a project they are working on. Also we are looking for group project activities or workshops or presentations to add value and interest to the Construction project meetings. So if you have something you'd like to share please let Gary know. Some topics that have come up in the past, have been soldering techniques, Raspberry PI's, Arduinio controllers. Other topics could be assistance in using test equipment, building antennas, and techniques on troubleshooting electronics. So if you having something contact Gary at n9vu@hotmail.com

Technician Class

Leo Ribordy, N9NBH

SARC will be holding an Amateur Radio Technician class over the course of 6 Saturdays starting in October. This class is free to the general public, but you must register at the Schaumburg Public Library or online. Full details below

Starting Saturdays October 14th from 10:30am to 12:30pm,

Days Oct 14, 21, 28, Nov 4, 11, 18

Location Hoffman Estates Branch of the Schaumburg Library 1550 Hassel Rd, Hoffman Estates

URL to register <https://schaumburg.libnet.info/event/294369> must register to attend

Sponsored by the Schaumburg Amateur Radio Club (www.n9rjv.org)

In this 8-week course, you'll learn everything you need to successfully sit for your Technician (entry level) FCC Amateur Radio License. Ham radio operator Leo Ribordy will review introductory, theoretical and practical knowledge necessary to operate a ham radio station. Knowledge of Morse code is not required to obtain a ham radio license.

This is a perfect class for anyone to get involved with Amateur Radio, open to the public, and there's no age restrictions in getting a license to operate. Just pass a 35 question test with a 75% or better and be on the air.

Official Notice for Absentee Ballet

Everyone,

Posting: Official Notification for Absentee Ballot Requests

Dear SARC Members in Good Standing:

If you expect to be unavailable for our November Business Meeting and wish to receive an Absentee Ballot, please respond to this email with your request.

I will provide you an Official Ballot as soon as Roger Ryan's W9RDR Nominating Committee has this year's candidates confirmed.

Frank Giampa N9QPD reminds me to include published procedures for this process:

Schaumburg Amateur Radio Club Procedure for Absentee Voting

The Radio Hill Gazette, newsletter of the Schaumburg Amateur Radio Club
July 2017



Resolution Establishing a Procedure for Absentee Voting

Whereas, the By-Laws of the Schaumburg Amateur Radio Club (SARC) call for the Board of Directors to Specify a procedure for allowing for the absentee balloting for the election of officers and board members, Therefore, be it resolved that:

1: The Secretary shall be directed to publish yearly, in the October issue of the Radio Hill Gazette newsletter of SARC, a notice that requests for absentee ballots must be made in writing to the secretary, the address to which the requests be directed, and the deadline for receiving such requests. The notification shall also include the entire text of this resolution.

2: Requests for absentee ballots shall be made in writing to the secretary at least 16 days before the date of the Annual Meeting. Written requests may be given directly to the secretary, sent to the official club post office box or to another address selected by the secretary (none at the moment), as published in the Radio Hill Gazette, has to received 16 days prior to the meeting.

3: The Secretary shall verify the eligibility to vote of anyone requesting an absentee ballot. Absentee Ballots and return addressed, postage paid envelopes shall be prepared and sent out by first class mail via the United States Postal Service, 14 days prior to the annual meeting. A record of those requesting and sent an absentee ballot shall be kept by the secretary, and they shall be ineligible to receive a ballot the night of the elections.

4: Upon receipt of an absentee ballot, members should mark the ballot appropriately and return the aforementioned ballot in the provided, pre-addressed, postage paid envelope. Ballots shall be mailed as to be received at least two days prior to the annual meeting, or presented in person at the meeting.

5: Ballots received by mail shall be left sealed until the night of the annual meeting. Ballots shall be given to the duly appointed ballot tallier, at which time, they shall be opened, and counted with the ballot of the general membership in attendance.

Regards,

Cliff Sowka K9QD

Miscellaneous activities / updates

Repeater updates - Kent W9KAO reports UHF and UHF link antennas for the Plum Grove tank are installed. Remaining task of terminating the cable in the ladder-way and installing a lightning suppressor. Equipment cabinet configuration will also need some effort before it's ready for placement in the ladder-way. Our budgeted \$1K repeater expense limit has been reached. We now need internal jumpers, arrestors, possibly \$300 or more.

President's Report - Matt AC9IG Reports new radio equipment discussion tabled until spring. Provided update on Nominating committee: Russ KC9NUV, Cliff K9QD, Ted AB9SZ, Roger W9RDR. Potential candidates should be ready for October RHG deadline and published before November Business Meeting.

Public Service - Rob N9MVO: Rob N9MVO: All Public Service events are over for the year

Social: Roger Ryan W9RDR. Club's [Relocating away from Pilot Pete's] Pizza Party will be 6PM October 14th Saturday night at Lou Malnati's in Schaumburg (Roselle/Schaumburg Road).

Fall Field Day - Rob N9MVO: Rob is proposing to have a Fall Field day on October 21st, and 22nd. The idea is to do the same thing as we do in June, but no generators, QRP only, make it a smaller event with less effort. The weekend coincides with other HAM events/contests. JOTA, or Scouting Jamboree on the Air, will be active. The Illinois QSO Party is that weekend as well. So the bands should be pretty active for making contacts.

Education: Leo N9NBH reported his plans for a fall TECHNICIAN Class are underway with Debbie Wolf of the library staff with a TECH class starting Oct 14th. Library facility on Hassle Road in Hoffman Estates is part of the Schaumburg Library and will be the site used. There is no charge for classroom and there is also no charge for students. Burt Shultz AB9CV is available to join Leo's Instructor staff.



Net Check-ins_– Leo N9NBH

SARC Net Check In's For Thursday, Sept 14th, 2017:

The following hams checked in to the net this evening. The question for the evening was what do you envision ham radio will be like in 60 years?

W9RKK	Robert
AB9CV	Burt
K9KQX	Mike
KB9RGU	Jim
N9NBH	Leo
K9NIB	Vince
WQ9M	Mark
K9EYT	Ray
AC9EM	Steve
KD9JBU	Joe
K9JML	Jim
KD9ESD	Chris
K9AAB	Kevin
N9MVO	Rob
K9EYE	Pierre
KC9NUV	Russ
N5HSR	Charles
N9VU	Gary
W9DXR	Bob
Check in totals:	19

VE Testing Results

Tom Doyle, K9MF Reports

NEXT EXAM: October 7th at Schaumburg Park District CRC;

Results for Sept 2nd. 2017, test session:

NUMBER NEW LICENSE

CLASS TESTED UPGRADE

Technician	3	3
General	1	1
Extra	3	3

Total: 7 7

****TECHNICIAN****

David A Kemke	KD9JGT
Steven W Kazlo	KD9JGQ
Alvareo Castro	KD9JGR

****GENERAL****

Marc G Berthoud	KD9ITG
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****EXTRA****

Lynton E Norstad	W0LEN
Paul Sagar	AC9RH

Alexander Novak N9VSB

All of us at SARC would like to congratulate all those that received or upgraded their license this month, and we welcome you to the amateur radio community. Hope to hear you on the air. Should you have any questions, come join SARC at our regular monthly meeting on the 3rd Thursday of the month or stop in at one of the Construction Meetings. Check the [SARC website](#) for times and locations.

Cheap Toys for those who like to build kits

by Dave Sims, K9KBM

Having a need for a signal generator to finish up an audio project I consulted my favorite cheap electronics source Banggood.com. And there it was a 1Hz to 1Mhz signal generator kit for \$10.23 with shipping. For those not familiar with Banggood it is a catalog of all sorts of goods from China and many of the goods are available from a US warehouse meaning the wait can be as short as a week. Their site does have a tab for ELECTRONICS and if you search Amateur Radio you will find all kinds of stuff from batteries to QRP transceivers, FOR CHEAP.

What the XR2206 generator will do: (on 9V battery)

Square wave with 5V output fixed.

Triangle variable output to 4.4V above which it starts to distort

Sine variable to 3.6V until distortion.

Controls:

The first knob is for amplitude the second for fine frequency adjust and the third for course frequency adjust.

Jumper switch #1 controls 5 frequency steps from 1Hz to 1 MHz.

Jumper switch #2 allows selection of triangle or sine output.

The laser cut plastic case was well done and the control functions were etched into the plastic.

Connections:

The power connection is a standard female jack of the type a mating wall wart would fit. The output is via a three screw terminal strip.

Performance:

When hooked to a high end scope it was stable and easy to tune. A good 9V battery seemed to be adequate and didn't show much loss after ½ hour.

Building tips for the uninitiated.

This kit definitely requires a fine tip soldering iron due to the small size of the solder pads. The resistor color codes are difficult to read so I strongly recommend checking with an Ohm meter. As always, I used the old Heath kit tip of putting the components into the cells of a piece of corrugated cardboard and identifying the values on the cardboard. Total build time is less than an hour.

Upcoming projects will include a \$25 pocket oscilloscope and a relative UV sensor.





Amateur Radio Flexibility & Encryption – (an op-ed)

By Vince - K9NIB

In talking with some people in IT recently, they were surprised to learn that I am a ham. I had to 'school' them on all of the technology in the hobby, and that amateur radio is certainly not only vacuum tube devices and cw keys anymore. Our hobby is constantly advancing, and that's one of the most awesome parts about it.

Then the question of encrypted transmissions reared it's ugly head.... "Now you done it! Dem's fightin' words!" In thinking about it further, maybe it warrants some further exploration. Our neighbors to the north already allow this, albeit on a simpler technology level (symmetric keys only for example, and the keys must be made publicly available). If criminal activity and abuse was a real problem, wouldn't they have done away with it by now?

Another more experienced, intelligent ham posed the questions to me:

- How would I implement encryption that only law abiding hams could use?
- How do you stop criminals and bad actors?

It took some gear-grinding to think about my answer. After all the thinking (to my surprise the gears didn't come to a screeching halt), I guess my answer is: You can't.

Currently, there is nothing actually stopping a bad actor from using equipment currently available to send encrypted messages. Criminals, by their very nature, disregard the law. If someone were to send a message in a strong cipher over packet radio on the 2m band, the radio won't automatically shut off when they start a transmission. Drug cartels in Mexico for instance, have already used an extensive radio repeater system for their communications. This was a fascinating read if you have the time:

<https://www.popsci.com/article/technology/radio-tecnico-how-zetas-cartel-took-over-mexico-walkie-talkies>

However, I do think there are some deterrents for nefarious use of amateur radio:

- 1.) **The community is 'self-policing' to a degree.** When there are flagrant violations, we as a community are encouraged and expected to report them to authorities so they can be dealt with.
- 2.) **We are a community.** There are many of us listening all the time, at all hours. Obviously, I'm a law abiding citizen. However, I would think a bad actor would want to keep their activities 'off the radar' as much as possible. The less people know about their activity, the higher the likelihood that they will get away with it. With tons of us listening, someone doing something illegally would be heard, reported, and found much more quickly over an amateur band than some other frequencies.

In further discussion with some IT folks, I narrowed a list down of what we thought a prudent approach with encryption could be:

- 1.) **Talk with hams in Canada as well as their communication authority to see how they've implemented it and if there are concerns/problems.** Fortunately, since another country has already done this we can hopefully tap them for their experiences, concerns, benefits, etc. Are the policies up North too lax?
- 2.) **Limit encrypted transmission to a particular band and time.** Maybe limit to the 33cm band only between 2am-4am with packet radio for example. I'm not saying this is the best band, method, etc., but just as an example.
- 3.) **Key lengths can be no larger than 64-bit** (at least to start with) and absolutely no public/private key encryption is allowed, only symmetrical.
- 4.) **Registration of any operators wishing to do so.** Keys must be made publicly available, call signs must be sent in the clear, and operators must be registered.

Then the question came up, "why bother?" What could we put down as a list of benefits for allowing it? Perhaps we can all learn from the experience of using it. This is the pared down list of what we came up with:

- 1.) **Better recognition of what these transmissions look/sound like.** We can't stop something if we can't identify it.
- 2.) **Development of methods to 'break' the encryption.** While government security agencies are hard at work with super-computing systems cracking strong AES encrypted data traffic, many of our home computers can crack 64 and 128 bit symmetric encryption, they're powerful enough. Maybe it would be neat to have pools of hams' computers work collectively on cracking transmissions? Make a challenge of it?

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3.) **Getting better at detecting and reporting violators.** If there is a standard, deviations from it can be better detected.

4.) **Usage for emergency communications.** If a ham is sending medical record information on behalf of an emergency responder, about a victim of a disaster, perhaps the fact that they have a medical condition should not be public knowledge or easily heard 'in the clear.' Maybe law enforcement will want a ham to send a message about a troubling situation, and it will be helpful to not have the public hanging around.

Maybe encryption on amateur is something that should be left in the amateur radio "pandora's box" and not let out. I certainly agree with the viewpoint that there should be no expectation of privacy while using amateur bands (or your company's e-mail account for that matter). If that's the case, perhaps we should get the concerns on record and refer to those arguments when it comes back around to explain why we won't allow it in the US. At the end of the day, we can all have fun with or without encryption and I certainly don't think it's on the 'must have' list.

So what do you think? Does encryption warrant further discussion? Does it 'kill the spirit' of ham radio or possibly bring a way to enhance it?

Thanks for reading. 73, Vince - K9NIB

Local and Regional Nets

In this new section of the RHG we'd like to build a list of HF, and VHF/UHF nets that might be of interest to our club members. Please send submissions to Leo N9NBH or Mike K9KQX

SARC	Technet	Tuesday's 7:30 CST	K9IJK	145.230mhz
SARC	Club Net	1 st , 2 nd , 4 th , Thursday 8pm	K9IJK	145.230mhz
TALARC Amer Legion		2 nd Sat, 12 noon		14.275Mhz
TALARC Amer Legion		3 rd Sun 5pm		7.245Mhz
TALARC Amer Legion		Wed		3.862 Mhz
EN52 Net		Wed 7PM		50.130Mhz
SUHFARS Do nothing net		Sun 9:00PM		443.250 +5Mhz 114.8hz PL

Chicago Area VHF/UHF frequencies

By Jim Campbell KB9RGU

Receive Fre- quency	Transmit Fre- quency	Offset Fre- quency	Offset Direc- tion	Name	Tone	CTCSS
145.23	144.63	600	Minus	EMCOM 1	Tone	107.2
145.23	145.23		Simplex	EMCOM 2	Tone	107.2
146.52	146.52		Simplex	EMCOM 3	Tone	107.2
147.42	147.42		Simplex	EMCOM 4	Tone	107.2
146.49	146.49		Simplex	EMCOM 5	Tone	107.2
147.015	147.615	600	Plus	EMCOM 6	Tone	107.2
146.76	147.36	600	Plus	EMCOM 7	Tone	107.2
145.47	144.87	600	Minus	KC9OEM	Tone	103.5
147.09	147.69	600	Plus	NORA	Tone	107.2
146.985	146.385	600	Minus	WB9TAL	Tone	107.2
146.73	146.13	600	Minus	DEKALB	Tone	100
147.18	147.78	600	Plus	LAKE	Tone	127.3



145.43	144.83	600	Minus	DARC 2	Tone	107.2
145.39	145.99	600	Plus	WCRA 2	Tone	107.2
146.67	146.07	600	Minus	WAFAR	Tone	107.2
146.88	147.48	600	Plus	SARA 2	Tone	107.2
147.285	147.885	600	Plus	NAPS 2	Tone	107.2
147.345	147.945	600	Plus	NSRC	Tone	107.2
146.4	146.4		Simplex	146400	None	67
146.43	146.43		Simplex	146430	None	67
146.46	146.46		Simplex	146460	None	67
146.55	146.55		Simplex	146550	None	67
146.58	146.58		Simplex	146580	None	67
147.405	147.405		Simplex	1474050	None	67
147.435	147.435		Simplex	1474350	None	67
147.45	147.45		Simplex	1474500	None	67
147.465	147.465		Simplex	1474650	None	67
147.48	147.48		Simplex	1474800	None	67
147.495	147.495		Simplex	1474950	None	67
147.51	147.51		Simplex	1475100	None	67
147.525	147.525		Simplex	1475250	None	67
147.54	147.54		Simplex	1475400	None	67
147.555	147.555		Simplex	1475550	None	67
147.57	147.57		Simplex	1475700	None	67
145.23	144.63	600	Minus	EMCOM 1	Tone	107.2
145.23	145.23		Simplex	EMCOM 2	Tone	107.2
146.52	146.52		Simplex	EMCOM 3	Tone	107.2
147.42	147.42		Simplex	EMCOM 4	Tone	107.2
146.49	146.49		Simplex	EMCOM 5	Tone	107.2
147.015	147.615	600	Plus	EMCOM 6	Tone	107.2
146.76	146.16	600	Minus	EMCOM 7	Tone	107.2
145.11	144.51	600	Minus	UFDA	Tone	107.2
145.13	144.53	600	Minus	FARG	None	107.2
145.15	144.55	600	Minus	BEAR	Tone	107.2
145.17	144.57	600	Minus	LUCENT	Tone	103.5
145.19	144.59	600	Minus	ARGONN	None	88.5
145.21	144.61	600	Minus	CEERS	Tone	107.2
145.43	144.83	600	Minus	DARC2	Tone	107.2
145.27	144.67	600	Minus	MOTO3	Tone	107.2
145.29	144.69	600	Minus	TCARS	Tone	103.5
145.39	144.79	600	Minus	WCRA	None	88.5
145.33	144.73	600	Minus	N9HEP	Tone	107.2
145.35	144.75	600	Minus	CEEARS	Tone	107.2
145.37	144.77	600	Minus	K9SO	None	88.5

145.41	144.81	600	Minus	ARROW	None	88.5
145.45	144.85	600	Minus	AREA	None	88.5
145.47	144.87	600	Minus	KC0EM	Tone	103.5
145.49	144.89	600	Minus	K9CSE	None	88.5
145.71	145.71		Simplex	145.71	None	88.5
145.77	145.77		Simplex	145.77	None	88.5
146.4	146.4		Simplex	146.4	None	88.5
146.415	146.415		Simplex	146.415	None	88.5
146.43	146.43		Simplex	146.43	None	88.5
146.445	146.445		Simplex	146.445	None	88.5
146.46	146.46		Simplex	146.46	None	88.5
146.475	146.475		Simplex	146.475	None	88.5
146.505	146.505		Simplex	146.505	None	88.5
146.535	146.535		Simplex	146.535	None	88.5
146.55	146.55		Simplex	146.55	None	88.5
146.565	146.565		Simplex	146.565	None	88.5
146.58	147.18	600	Plus	NIARC	None	88.5
146.595	146.595		Simplex	146.595	None	88.5
146.61	146.01	600	Minus	RARA	Tone	114.8
146.525	145.925	600	Minus	N9IPS	None	88.5
146.64	146.04	600	Minus	STARS	Tone	107.2
146.665	146.065	600	Minus	CLRG	Tone	107.2
146.67	146.07	600	Minus	WAFAR	Tone	107.2
146.685	146.085	600	Minus	MTHERS	Tone	107.2
146.7	146.1	600	Minus	STROKE	Tone	100
146.7	146.1	600	Minus	LAKEMA	Tone	82.5
146.715	146.115	600	Minus	PRL	Tone	107.2
146.73	146.13	600	Minus	WB9RFQ	Tone	107.2
146.73	146.13	600	Minus	KARC	Tone	100
146.745	146.145	600	Minus	N9OIG	Tone	127.3
146.79	146.19	600	Minus	VARA	Tone	107.2
146.805	146.205	600	Minus	TRIFAR	Tone	107.2
146.835	146.235	600	Minus	K9ESV	Tone	91.5
146.835	146.235	600	Minus	WB9VRG	None	88.5
145.85	145.25	600	Minus	MAPS	Tone	100
146.865	146.265	600	Minus	LAARC	None	88.5
146.88	146.28	600	Minus	SARA	Tone	107.2
146.895	146.295	600	Minus	A9IHD	Tone	103.5
146.91	146.31	600	Minus	WA9JLN	Tone	131.8
146.94	146.34	600	Minus	KARS	None	88.5
146.955	146.355	600	Minus	WB9ZPE	Tone	114.8
146.97	146.37	600	Minus	SMCC	Tone	107.2

146.985	146.385	600	Minus	ACL	Tone	107.2
147	147.6	600	Plus	RARA	Tone	114.8
147	147.6	600	Plus	LAKEIN	Tone	131.8
147.03	147.63	600	Plus	N CHGO	Tone	127.3
147.03	147.63	600	Plus	WB9RKD	Tone	107.2
147.045	147.645	600	Plus	OGLECO	None	88.5
147.09	147.69	600	Plus	NORA	Tone	107.2
147.105	147.705	600	Plus	DUNLAND	Tone	131.8
226	224.4	1.6	Minus	W9XA	Tone	110.9
225.82	224.22	1.6	Minus	K9NB	Tone	110.9
226.14	224.54	1.6	Minus	K9BAR	Tone	110.9
226.08	224.48	1.6	Minus	KB9EPL	Tone	110.9
225.76	224.16	1.6	Minus	K9SAO	Tone	110.9
226.18	224.58	1.6	Minus	WB9TAL	Tone	110.9
225.74	224.14	1.6	Minus	W9CCU	Tone	110.9
226.2	224.6	1.6	Minus	W9AP	Tone	110.9
226.4	224.8	1.6	Minus	W9MAB	Tone	127.3
225.52	223.92	1.6	Minus	W9ZS	Tone	114.8
226.1	224.5	1.6	Minus	WA9ZZU	Tone	192.8
225.96	224.36	1.6	Minus	WB9GXJ	Tone	110.9
224.62	223.02	1.6	Minus	W9AEK	Tone	110.9
223.84	222.24	1.6	Minus	K9SA	Tone	110.9
224.86	223.26	1.6	Minus	W9SRO	Tone	110.9
224.94	223.34	1.6	Minus	NZBJ	Tone	114.8
224.26	222.66	1.6	Minus	W9VGI	Tone	110.9
224.82	223.22	1.6	Minus	K9ONA	Tone	110.9
224.2	222.6	1.6	Minus	W9NPD	Tone	110.9
224.42	222.82	1.6	Minus	NZBJ 2	Tone	114.8
224.92	223.32	1.6	Minus	NK9M	Tone	110.9
223.96	222.36	1.6	Minus	WB9UAR	Tone	110.9
224.78	223.18	1.6	Minus	WA9ZMY	Tone	110.9
224.38	222.78	1.6	Minus	WB9WNK	Tone	110.9
223.94	222.34	1.6	Minus	N9EP	Tone	110.9
224.56	222.96	1.6	Minus	K9EL	Tone	110.9
224.66	223.06	1.6	Minus	WB9YBM	None	67
224.85	223.25	1.6	Minus	KB9MAU	Tone	110.9
224.98	223.38	1.6	Minus	WB9AAET	Tone	110.9
224.32	222.72	1.6	Minus	NS9RC	Tone	110.9
224.64	223.04	1.6	Minus	N9XP	Tone	110.9
224.72	223.12	1.6	Minus	W9DMW	Tone	103.5
223.86	222.26	1.6	Minus	N9TO	Tone	110.9
224.18	222.58	1.6	Minus	WA9ORC	None	67

223.4	223.4		Simplex	2234000	None	67
446.25	441.25	5	Minus	EMCOM8	Tone	114.8
444.125	449.125	5	Plus	EMCOM13	Tone	114.8
444.875	449.875	5	Plus	EMCOM9	Tone	114.8
443.575	448.575	5	Plus	EMCOM10	Tone	114.8
443.725	448.725	5	Plus	EMCOM11	Tone	114.8
442.8	447.8	5	Plus	EMCOM12	Tone	114.8
442.025	447.025	5	Plus	PADXA	Tone	100
442.075	447.075	5	Plus	9JYA	Tone	100
442.075	447.075	5	Plus	N9CCE	None	88.5
442.075	447.075	5	Plus	LAKEIN4	Tone	131.8
442.1	447.1	5	Plus	RATFAR	Tone	114.8
442.125	447.125	5	Plus	AZTECA	Tone	203.5
442.15	447.15	5	Plus	WD9IAE	None	88.5
442.2	447.2	5	Plus	IARA	Tone	173.8
442.2	447.2	5	Plus	N9OIG	Tone	114.8
442.225	447.225	5	Plus	IHARC	Tone	114.8
442.275	447.275	5	Plus	SARC 4	Tone	114.8
442.3	447.3	5	Plus	WCARL	None	88.5
442.325	447.325	5	Plus	LK BLF	None	88.5
442.35	447.35	5	Plus	WD9HSH	Tone	88.5
442.35	447.35	5	Plus	PRTRAC	None	88.5
442.375	447.375	5	Plus	WB9PIZ	Tone	114.8
442.375	447.375	5	Plus	N9AWQ	Tone	210.7
442.4	447.4	5	Plus	PARC	Tone	114.8
442.425	447.425	5	Plus	K9SA	Tone	114.8
442.475	447.475	5	Plus	KA9HPL	None	88.5
442.5	447.5	5	Plus	WOODFR	Tone	114.8
442.5	447.5	5	Plus	OGLECO	Tone	146.2
442.525	447.525	5	Plus	CEEARS	Tone	114.8
442.55	447.55	5	Plus	DARC 4	Tone	114.8
442.6	447.6	5	Plus	KA9VZO	Tone	123
442.625	447.625	5	Plus	PIGFAR	Tone	100
442.65	447.65	5	Plus	WCEMA	Tone	136.5
442.675	447.675	5	Plus	STARS	Tone	131.8
442.725	447.725	5	Plus	NSRC	Tone	114.8
442.75	447.75	5	Plus	KA9FUR	Tone	123
442.75	447.75	5	Plus	WA9JLN	Tone	131.8
442.775	447.775	5	Plus	W9TK	Tone	110.9
442.825	447.825	5	Plus	N9KUX	Tone	114.8
442.85	447.85	5	Plus	ARP	Tone	107.2
442.875	447.875	5	Plus	YORKRC	Tone	114.8

442.95	447.95	5	Plus	WB9HYB	Tone	114.8
443	448	5	Plus	NARC	Tone	114.8
443.025	448.025	5	Plus	W9DWP	None	88.5
443.05	448.05	5	Plus	NEMA	Tone	114.8
443.075	448.075	5	Plus	STROKE	Tone	114.8
443.1	448.1	5	Plus	STROKE	Tone	114.8
443.125	448.125	5	Plus	KG9F	Tone	114.8
443.15	448.15	5	Plus	NARA	Tone	114.8
443.175	448.175	5	Plus	W3ATP	Tone	123
443.2	448.2	5	Plus	FROGFR	Tone	131.8
443.25	448.25	5	Plus	SUHFAR	Tone	114.8
443.275	448.275	5	Plus	N9ZD	Tone	114.8
443.3	448.3	5	Plus	SMCC	Tone	114.8
443.325	448.325	5	Plus	WD9HSY	Tone	114.8
443.35	448.35	5	Plus	K9SA	Tone	114.8
443.375	448.375	5	Plus	WB9RFQ	None	88.5
443.4	448.4	5	Plus	RAYFAR	Tone	114.8
443.425	448.425	5	Plus	GUFAR	Tone	131.8
443.45	448.45	5	Plus	WB9TFX	Tone	114.8
443.45	448.45	5	Plus	LAKEMA	Tone	82.5
443.475	448.475	5	Plus	N9EHP	Tone	114.8
443.5	448.5	5	Plus	WA9Z	Tone	118.8
443.5	448.5	5	Plus	N9LCH	Tone	114.8
443.525	448.525	5	Plus	BARS	Tone	127.3
443.55	448.55	5	Plus	N9LCH2	None	88.5
443.6	448.6	5	Plus	WAFAR	Tone	114.8
443.65	448.65	5	Plus	STROKE	Tone	114.8
443.7	448.7	5	Plus	ACLR	None	88.5
443.75	448.75	5	Plus	CFMC	Tone	114.8
443.775	448.775	5	Plus	BARN	Tone	114.8
443.775	448.775	5	Plus	N9JSF	Tone	127.3
443.8	448.8	5	Plus	SADFAR	Tone	88.5
443.825	448.825	5	Plus	ICS	Tone	136.5
443.85	448.85	5	Plus	LAKECO	Tone	114.8
443.9	448.9	5	Plus	SERCOM	Tone	114.8
443.925	448.925	5	Plus	LAKCAR	Tone	114.8
443.95	448.95	5	Plus	CHUMPS	Tone	131.8
443.975	448.975	5	Plus	AIRA	Tone	114.8
444	449	5	Plus	CUBES	None	88.5
444.025	449.025	5	Plus	FOXFAR	Tone	103.5
444.05	449.05	5	Plus	TARC	Tone	114.8
444.05	449.05	5	Plus	KA9LOK	None	88.5



444.1	449.1	5	Plus	ELFAR	Tone	100
444.125	449.125	5	Plus	K9UTH	None	88.5
444.15	449.15	5	Plus	K9UAW	Tone	114.8
444.175	449.175	5	Plus	KA9ATL	Tone	114.8
444.2	449.2	5	Plus	TFAR	Tone	114.8
444.225	449.225	5	Plus	FRMILB	Tone	114.8
444.25	449.25	5	Plus	CDES	Tone	114.8
444.275	449.275	5	Plus	KA9KDC	Tone	114.8
444.3	449.3	5	Plus	FRRL4	Tone	114.8
444.325	449.325	5	Plus	WB9OUF	Tone	114.8
444.35	449.35	5	Plus	KB9KRI	Tone	131.8
444.375	449.375	5	Plus	SARA 4	Tone	114.8
444.4	449.4	5	Plus	KB9RKD	Tone	114.8
446	446		Simplex	CLLNG4	None	88.5
446.05	446.05		Simplex	446.05	None	88.5
446.3	446.3		Simplex	446.3	None	88.5
444.475	449.475	5	Plus	WCRA 4	Tone	114.8
444.525	449.525	5	Plus	KCOEM	Tone	114.8
444.5	449.5	5	Plus	WEW9	Tone	114.8
446.3	446.3		Simplex	WAFARS	Tone	114.8
446.05	441.05	5	Minus	CARMA	Tone	114.8



SARC March Club Notes

Schaumburg Amateur Radio Club Board of Director's Meeting Sep 6, 2017

Kent Ochs W9KAO Chairman called the meeting to order at 7:01 PM.

Attendees:

Gary Bernstein	N9VU	Roger Ryan	W9RDR	Chris Brewer	AC9GN
Frank Giampa	N9QPD	Kent Ochs	W9KAO	Russ Schmidt	KC9NUV
Cliff Sowka	K9QD	Ted Lester	AB9SZ	Matt Walsh	AC9IG
Leo Ribordy	N9NBH				

Treasurer's report: Chris Brewer AC9GN reports: Beginning balance for the month was \$4,677.25. Income was \$0. Expense was \$63.24 for data-line, Field Day generator gas. Ending balance is \$4,614.01. Paid Membership is currently 38. Gary moved, Russ seconded. So moved.

President's Report: Matt AC9IG Reports new radio equipment discussion tabled until spring. Provided update on Nominating committee: Russ KC9NUV, Cliff K9QD, Ted AB9SZ, Roger W9RDR. Potential candidates should be ready for October RHG deadline and published before November Business Meeting.

SARC Repeaters: Kent W9KAO reports UHF and UHF link antennas for the Plum Grove tank are installed. Remaining task of terminating the cable in the ladder-way and installing a lightning suppressor. Equipment cabinet configuration will also need some effort before it's ready for placement in the ladder-way. Our budgeted \$1K repeater expense limit has been reached. We now need internal jumpers, arrestors, possibly \$300 or more. Cliff K9QD moved for \$500 increase. Russ KC9NUV seconded. So moved.

Public Service: Rob N9MVO Not present.

Secretary's Report: Cliff Sowka K9QD: Approval of published Meeting Minutes: Russ KC9NUV moved, Ted AB9SZ seconded. So moved.

RHG: Mike Sorensen K9KQX asks for articles with topics from anything Ham Radio related.

Construction Project: Gary N9VU Reports Saturday 9th cabinet survey is set with announcements to membership to join in the effort. The idea is to select HamFest items that can be sold during the last two events for 2017. Gary suggests he may send an announcement to SARC_ALL looking for project suggestions this coming fall when Construction Project resumes.

Social: Roger Ryan W9RDR. Oct 14th Lou Malnatis 'Pilot Petes' event is still on plan.

Education: Leo N9NBH reported his plans for a fall TECHNICIAN Class are set. No-charge classes begin 10:30AM and end 12:30PM. Hoffman facility is where classes will be held; sign-up through the Schaumburg Library site. TECH class starting Oct 14th.

VE Testing: Dirk Smith K9DFS Not present but provided this report:

7 Tested	ALL PASSED
3	EXTRA
2	GENERAL
2	TECH



All tried next level but failed

Nothing new with WEB site,

Have some pictures from FD 2017 for Leo for Sep 30.

EMCOMM: Bob Langsfeld WB9TZC Not Present but provided following report:

ARES: Had a breakout meeting and presented a 2-hour segment on ARES RACES and AUXCOMM.

It was well attended and a discussion on the upcoming Rockford meeting and future plans for EmComm in the state

We also have a booth for EmComm at the Schaumburg Public Safety Day.

Programs: Cliff Sowka K9QD: October presentation will be Software Defined Radio (SDR).

Nets: Matt AC9IG is tweaking the script used for our check-ins.

Ebay Sales: Gary N9VU. There are no items currently listed for sale. We're planning for Saturday September 9th as a time for cleansing the storage cabinets and finding eligible items for the two remaining Hamfests; items not sold will then be placed in eBay listings.

Old Business: Matt AC9IG reported the activity to set-up a committee to recommend standardized radio equipment for the club's Field Day events is tabled until spring. Next club meeting: officer in authority needs to publicize the By Law changes option timetable in time for fall elections.

Absentee Ballots: Cliff K9QD will send SARC_ALL request for Absentee Ballots:

Once a member certifies they're in good standing and unable to attend the November meeting the Secretary will send USPS ballots to be executed and returned to the club's PO Box in time for the November Meeting elections. Frank N9QPD suggested this announcement should also include cut/paste copy of *elections resolution* from our website.

We'll need to poll membership during our October Business Meeting regarding the annual January party venue.

Roger W9RDR Nominating Committee: Ready for November RHG (Oct deadline). Bylaw changes are ruled by the same process.

Adjourn 8:28PM.

Submitted: September 7, 2017 Cliff Sowka K9QD Secretary.

[A Call for Programs](#)

Some Potential Topics: RF Transmission Fundamentals. ARRL Awards. ARRL Contests. Semiconductor Developments. Operating Tips. QSL Card Process. Managing Pileups. Public Service Emergency Communications. Village of Schaumburg Volunteers. Field Day Planning. Basic Electronics. Inductive /
[The Radio Hill Gazette, newsletter of the Schaumburg Amateur Radio Club](#)
July 2017



Capacitive Reactance Biasing. Transistors. uController Projects. SDR / Dongle Radio Tricks. Grid Locators. Frequency Charts. Antenna Basics / Installation Advanced Antenna Tricks. Measuring Antenna Impedance. Lightning Protection. Shack Electrical Facilities. Solar Cycle Considerations.

Ideas for presentations are endless. Our membership has talented and experienced people who are asked to contribute to interesting business meetings by bringing some of their knowledge forward for all to benefit. Please let me know if you wish to present a topic and I will include your ideas into the schedule. Then our diverse membership will provide enthusiastic participation for a rewarding outcome. Cliff Sowka K9QD Program Chair



SARC Board of Directors Meeting

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