

The Radio Hill Gazette

February 2016

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From the Editor

Welcome to another edition of the Radio Hill Gazette.

The new year is in full swing and winter has finally set in here in the Midwest. I hope you got all your outside projects finished as it will likely be some time before you can get much done.

Were you able to make it in the logs of some juicy Top 10 DX entities recently? K5P on Palmyra island apparently went well, but the VP8STI operation to South Sandwich Island has been battling blizzards and may shut down earlier than planned.

The planning for Field Day 2016 is already underway and I hope everyone can get behind the direction and support what needs done. Please be part of the solution and help make 2016 our best showing as we take back the top spot in 2A IL.

Just one more thing, are you an Amateur Radio Operator or merely an Amateur Radio Licensee?

Anthony
Editor, RHG

Notice: I will step away as editor of the RHG following the December 2016 issue. Someone needs to step up and assume the responsibility for the newsletter so it can continue as a valuable part of SARC's communication structure. If you are reading this, then ***you are someone!***



From the President

SARC Members – Greetings and wishing you a terrific 2016! We have a fine club and are all looking forward to fellowship, fun, and excitement this year. We are already off to a good start. Recent club activity includes the following:

1. New Elmer Program - There is an amazing amount of amateur radio and electronics knowledge, experience, and talent in our Club. Having assisted with VE Testing over the last year, I have been asked on several occasions by new hams if our club has an “Elmer type” program. Seven individuals have stepped up to be volunteer “Elmers” that will assist new Hams with everything from setting up a home station to knowing how to best operate in a SSB Contest.
2. Summer Field Day Planning Meeting January 18 - Our intention is to make this year’s Field Day even more successful than last year’s when we took 2nd place in IL for the 2A Category. My personal goal is to maximize Club member operating time participation for the GOTA, SSB, and VHF Stations, possibly even the CW Station... Not only will this be fun, but you may gain valuable “radio operating time” experience.
3. Despite the cold, many members are mounting an effort for our First Winter Field Day which will be held on January 30, 2016, at the Schaumburg CRC Pavillion – yes, outdoors! Watch the reflector for details.

Let’s continue to make this Club enjoyable and educational in 2016. Take it to the next level!

Steve, AC9EM
President
Schaumburg Amateur Radio Club

SARC Holiday Party 2015

Another year has gone by and as a club celebration we held our holiday party at Bouna Beef located in Hoffman Estates Ill.

A good time was had by all. We had 24 hams and 3 guests at our party.

N9NBH	Leo Ribordy	W9RDR	Roger Ryan
N9JAX	Bob Benwitz	K9QD	Cliff Sowka
KO9H	Ken Field	KB9WCA	Carl Peterson
KC9PLO	Rich Cook	K9DFS	Dirk Smith
K9UD	Don Smith	AC9GN	Chris Brewer
N9LQ	Joel Gray	WB9PTA	Ronald Remus
W9KAO	Ken Ochs	N9MVO	Rob Glowacki
AB9YC	Anthony Willard	WB9TZC	Bob Langsfeld
N9QPD	Frank Giampa	AC9EM	Steve Karson
KB9QVX	Kevin Willard	AB9SZ	Ted Lester
KB9IIZ	Jarek Stopczyk	W9DXR	Bob McIntyre
AC9JS	John Schofield	N9GCW	AndreaLangsfeld
Guest	Debra Ryan	Guest	Kitt Cook
Guest	Pauline Boyle		

Two awards were handed out at the celebration. Anthony, AB9YC Received the Member Of The Year award. Rob, N9MVO received the Bill Smead award for his outstanding contribution to the Construction project meetings.



Illustration 1: Rob N9MVO



Illustration 2: Anthony AB9YC

It's Here.....and It's a Bird.

Cliff Sowka K9QD

A Lucky find at this year's West Allis Radio Club's Hamfest:

Bird Industry's Tx Rx Systems 2-Meter Duplexer

The Need

The Village of Schaumburg provides us with two radio sites for our K9IIK Repeater system. The Receive site is located at Schaumburg Road/Barrington Road with the existing Village Water tank supporting our Receive antenna with associated desirable elevation. The Transmit site is located just southwest of Motorola Corporate Tower at another Village Water tank facility situated at Plum Grove/Remington Road, also providing us with wonderful antenna elevation. The two sites are linked together with an additional 440MHz radio setup between each water tank that allows the Receive and Transmit sites to be distantly located. This distance separation of the Transmit Site from the Receive Site means we don't have the need for a Duplexer. A Duplexer allows both Tx and Rx signals to be on the same antenna at the same instant. This is called Full-Duplex and can only be accomplished on the same antenna with a filter capable of sharply discerning the heavy TX current from the feeble RX current.

The Village of Schaumburg performs preventative maintenance on the Water Tanks and has planned to Let Bids to professional Water Tower painters specifically for the location of our Transmit site in their 2016 Annual Budget. Bids will be Let in May and responses are expected during this coming summer. Scheduling of their contracted sandblasting/epoxy coating operations will occur sometime afterword.

This operation will require us to remove the K9IIK Transmit equipment we have situated at the site and therefore would take us off the air while maintenance is ongoing. A Duplexer would allow us to combine our Transmit and Receive equipment together at one, single site. Expense of a Duplexer capable of operating on the 2-Meter Band at the power level we're operating is typically quite substantial. This expense is because the mechanical filter assembly is precisely designed and carefully machined (even has precious metal, high conductivity, plating inside) for very sharp band pass/band reject performance. We're now prepared for this eventual move off the Water Tower and will be able to select a single location for use during the Transmit site's closure.

The Find

At 5:50AM Saturday January 9th, the doors opened for Vendor entrance and ... there it was waiting to come inside. A quick man-hunt around the building for the Duplexer's owner ensued and the commitment was set.

Kent Ochs W9KAO Chief Engineer for our machine, previously specified our club's consideration should be limited to searching for a top-quality Bird, or maybe Decibel brand, or such other Duplexer of notable quality.

Good news is we've been able to procure the Real Thing.

The Budget

Also good news, we spent only one-fourth of the anticipated/budgeted amount. Now we can consider budgeting irresponsibly for food expenditures this coming Field Day. Ken Field may soon enjoy unlimited resources [think December's Omnibus Bill] and continue to provide gourmet groceries for us this coming June. Apparently this was a ~\$3,100 (when new) 400 Watt capacity Duplexer assembly but we luckily procured it for \$300.

Rob N9MVO and I checked this used assembly at the show and decided to go ahead and make the commitment for our club.

Once we get this thing tuned, the K9IIK Repeater operation won't have to suffer from a temporary banishment away from the Transmit site when planned re-painting commences sometime in the distant future. Time away from the Transmit site won't disrupt us now that we can install both Receive and Transmit on the same antenna which also allows both radios to be located at a single site. Cost of Duplexers at this operational frequency (145MHz) have always been a limiting factor (they're large) when budgeting the overall repeater equipment expense.... and may have been one of the main reasons for K9IIK's original, two-site architecture we have today.

Interestingly, only a few weeks from when the December General Business meeting attendees approved an expenditure of up to \$1,200, and only a few days from when our Board of Directors ratified the approval, were we able to strike this find.

Next Steps

Tuning should go well since this Duplexer is only a few KHz away from our needs. The factory datasheet of this Duplexer assembly indicates a tunable range of 136MHz through 174MHz. We're going to need slots right near the bottom of this bandwidth. Additionally, the duplexer he now own is already sitting on RX 144.870 and TX 145.470. This means adjustments should be minor and easy to achieve.

Factory Specifications

Bird Technologies - The RF Experts
136-174 MHz, Duplexers

Bird Technologies manufactures a comprehensive line of duplexers with the critical specifications you require to operate a high performance system. Whether your application has a challenging T-R frequency spacing or requires broadband duplexed windows to implement a single antenna system, our duplexers provide the transmitter and noise suppression characteristics you need while minimizing the loss to your carriers.



136-174 MHz, Duplexers

The Find

Here is what we found at the Hamfest: Assembly Number 36-37-98374-A-R1

A can of pop (soda for you cheese heads) is placed for size comparison. Cans show no signs of external damage and the cable assemblies appear to be factory-assembled and installed. We'll soon find-out if the equipment will perform as expected and are hopeful the seller's representation was truthful (it was a Hamfest after all). Hopefully Kent W9KAO, our repeater's Chief Engineer, will be able to accommodate the 6-cubic feet required to house this filter; it's big.



Tuning

Tuning/Calibration operations will be planned for a future Construction Project meeting. Fortunately we have several club members with both the experience as well as the required test equipment to peak this filter. The operating frequencies for K9IIK are uncannily very close to the existing filter settings of the Duplexer we purchased and it should go smoothly. We also have some allotment time before the Village of Schaumburg is set to push us off the Transmit Site. That relaxed timeframe allows us to take care in calibration and testing of single-site operation.



Emergency!

Bob WB9TZC

Rapid Deployment Go Kit

At the last SARC meeting I discussed Go Kits and mentioned that each is different depending on the incident. There is a universal rapid deployment kit for those times when the incident is a true unplanned emergency. The basic kit is as follows,

- Preprogrammed Dual Band Hand Held radio
- radio programming guide
- mag-mount antenna
- earphone
- paper and pencil
- ID card and some cash
- Extra batteries
- Appropriate clothing
- Food and Water

This will get you on your way along with a pocket of Boy Scout stuff. If its not all together take the list and place it by your ham station so you do not forget to check it off when you leave the house. The next best thing to bring is a mobile radio, antenna and a cigarette lighter plug. You may need the higher power due to the repeaters being down or have to operate from a different vehicle or serve as a base station with a power source.

As always take care of your family first. Please use good operating practices LISTEN to the net control station. Do not transmit unless requested, use discipline and do not babble, spread rumors, or transmit hearsay. Work with confirmed facts! Remember the radio is on in the EOC everyone is listening.

After the initial deployment additional equipment and radio operators can be added to the incident as it expands. Infrastructure fails, plan on operating with out the use of repeaters and external power in the field and at home. You may have noticed I did not mention HF. Most disasters are local incidents and VHF /UHF work just fine for local incidents. My opinion is to relay messages to a comfortable well equipped home station with good antennas for the long haul communications.

Listen, Be safe, Operate SMART,
Robert Langsfeld WB9TZC
Schaumburg Township Area
ARES EC

SARC Board of Director's meeting, Pilot Pete's on Jan 6, 2016

Rob Glowacki N9MVO Chairman called the meeting to order @ 7:03PM

Attendees

Ted Lester	AB9SZ
Roger Ryan	W9RDR
Gary Bernstein	N9VU
Kevin Willard	KB9QVX
Leo Ribordy	N9NBH
Jim Brink	W9JFB
Dirk Smith	K9DFS
Jarek Stopczyk	KB9IIZ
Anthony Willard	AB9YC
Chris Brewer	AC9GN
Cliff Sowka	K9QD
Steve Karson	AC9EM

Motion to elect new Chairman for 2016 Board:

-Kevin Willard KB9QVX nominated by Anthony AB9YC seconded by Rob N9MVO.

Discussion, call for the question: So moved. Kevin KB9QVX will be SARC Chairman of the Board for 2016

Secretary's Report: Meeting minutes as published in the RHG accepted as presented.

Motion to empower Elected Officers of club to become voting members of the Board: So moved.

Treasurer's Report: Beginning Balance \$3,379.09. Income \$321.52. Expense \$135.79. Ending Balance of \$3,563.84.

Public Service. Rob N9MVO reported MS Walk plans are currently expected to be similar to last year. Early June will be Tour De Cure and planning expected to begin around Jan 12th.

Radio Hill Gazette: Anthony AB9YC needs articles. Reminded Board of his tour as Editor will be ending December 2016. Board and general membership needs to recruit a new publisher during the next several months.

Repeater Location for EMCOM equipment: Leo N9NBH reported permanent location will be announced shortly. Frequency Coordination to be determined.

Construction Project: Ted Lester AB9SZ: Is going well. Many projects. Next construction project is on Sat, Jan 9th. Gary N9VU will help Ted setup 7:30AM.

VE Testing, Steve Karson AC9EM: 3 people applied with all passing: 2 Tech and 1 Extra

Social: Roger Ryan W9RDR: Christmas Party on Thursday 21st of Jan 2016 (6:30PM) at Buona Beef. Those wanting to participate in ~\$10 grab bag gift can do so – “if you bring a gift, you can pick one”.

PaintBall event would cost \$35 for Group Events which includes equipment, paintballs, and admission. Timing to be determined but thinking early Spring. Group events are much less expensive and provide for reasonable rental attire, supplies, when arranged in advance.

Nets: Jim Brink KC9UPAW9JFB: Receiving 8~10 log-ins. Tech Net has been vacant for the past month so will be idled for the future. Held every 1st, 2nd, 4th and [5 th Thursday of month] Matt does 4th Thurs.

Education: Technician class, but need ad hoc classroom location. SRC rooms on Bode Road book up fast. Jarek KB9IIZ has completed some preliminary inquiry of Library space. Also consider Hoffman Estates Police Station as location. Ted’s AB9SZ Construction Project basement could also be used in a pinch but the Board felt that we should not abuse with extraneous, unexpected, additional presence at the facility without notification to the Park. Jarek KB9IIZ will try to solidify schedule within next month and notify SARC-ALL. SARC members wishing to assist with instructor tasks will have opportunity to respond to broadcast later in January. Not budget was requested for classroom training materials at the moment.

Publicity: Dirk Smith K9DFS reported his background and qualifications for this new post. His goal is to create new information fliers that are coordinated for specific event themes. Place SARC Banners in prominent location during Club Events to gain more public awareness. Winter Field Day planning should also display a Banner because the traffic to the Recreation Center is very strong and exposure would be welcomed.

Foxhunt: Steve AC9EM: done for season

Programs: Cliff Sowka K9QD: Need program for February Business Meeting.

EmComm, Bob Langsfeld WB9TZC (not present) Expect his next meeting early February at Hoffman Estates Police Dept.

Recurring calendar: Field day 2016, Water Tank painting timeframe still unknown. Steve reminded Jan 18th for FD Planning @ 6PM at the normal business meeting location at Schaumburg Recreation Center on Bode Road.

Winter FD Jan 30~31, 2016 – 2 hours, generators, SSB station, Steve K AC9EM has reserved Schaumburg Recreational Center (normal SARC meeting location) room.

Illinois Corp Report: File annual SARC corporate report due. Chris AC9GN.

Alternate FD site: Schaumburg village, Bill Clark update. Cliff K9QD and Leo heard from Bill that Schaumburg Village budget is finalized in May, bids for water tower maintenance are offered in June, and contractors usually respond before the end of summer. This means we are not in jeopardy of losing the current FD location for this coming year. There is a possibility that our transmit site equipment will be temporarily evacuated sometime next year and the FD location will not be available either. The timing of this will depend upon Village contract award, weather, and contractor's schedule. .

Ebay Sales: Gary N9VU will place Drake Station up for Auction this weekend. Kenwood TS830 received can go up for sale. Also have SB220 KW Linear and others: In pipeline: TR-7, TR-4 is for sale, Kenwood. TS570 comes with Power Supply (no 6-meter capability). First put in RHG, then EBAY.

Bill

Smead Award (outstanding contributor to Construction Project) and SARC Member of Year for 2015 award will be announced and presented at Jan 2016 Christmas party.

Old business: Cliff: club needs to purchase professional quality duplexer for the eventual case when we lose Water Tank (painting could throw us off the tower for several months). Need to give Kent authorization to buy used duplexer. Rob moved \$1.2K budget for Kent to purchase Duplexer. Gary N9VU seconded. Discussion. Kent W9KAO now has budgeted headroom for first-class equipment procurement.

New business: Last Saturday of the month is Winter FD. Mini SARC to be held under the Shelter at Bode Road. SARC-ALL announcement will announce Leo's planned start of 11AM.

Duplexer: Board completed action item from December business meeting where the club attendees authorized \$1,200 for Kent Ochs W9KAO to purchase a Duplexer for the repeater and the Action for Approval was assigned to the January Board meeting. Expenditure approved tonight and funds will be available from the Treasury when requested. This purchase will allow our repeater to remain on the air during Water Tank Painting downtime (expected to occur within the next two summers). Passed and will also be placed in the 2016 Budget.

Budget for 2016 Chris AC9GN reviewed the budget from 2015, read the expenditures to the Board, and made small adjustments according to member's input for 2016. Will send final copy to the BOD and also to RHG for publication.

Component Tester for Construction Project: Chris AC9GN moved the club purchase ~\$35 Tester for general use. Motion passed and expense will be placed into the Construction Project budget for 2016.

Submitted: Jan 6th 2016 Cliff Sowka, Secretary

Tech Net is not SK

SARC's Technical Net is not dead. We still meet on Tuesday Evening 's starting at 7:30 PM.

My name is Leo, N9NBH, and I will be the Net Control Operator. We will not meet on the first Tuesday of each month due to another commitment. At this time we are working on antenna modeling, using 4NEC2.

This is freeware and can be downloaded from the internet. The antenna exercise we are working on is a 1/2 inch copper J pole.

So download the 4NEC2 program and join us on Tuesday evenings.

73 N9NBH
Leo Ribordy

A Call for Programs

Potential Topics

RF Transmission Fundamentals
 Semiconductor Developments
 Managing Pileups
 Village of Schaumburg Volunteers
 Inductive / Capacitive Reactance
 SDR / Dongle Radio Tricks
 Antenna Basics / Installation
 Lightning Protection

ARRL Awards
 Operating Tips
 Public Service
 Field Day Planning
 Biasing Transistors
 Grid Locators
 Advanced Antenna Tricks
 Shack Electrical Facilities

ARRL Contests
 QSL Card Process
 Emergency Communications
 Basic Electronics
 uController Projects
 Frequency Charts
 Measuring Antenna Impedance
 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

Trading post, things for sale or trade

“Nothing! I got absolutely nothing!”

Calendar and things to do

February

Breakfast at Maxfields	6
Board of directors meeting	3
EmComm Roundtable	20
Club Meeting	18
ARRL DX CW	20-21
NAQP RTTY	27-28

There are plenty of contests this month operating in many modes on various bands, so find one and listen in. Check out <http://www.hornucopia.com/contestcal/weeklycont.php> to see what's coming up.

Looking ahead

VE Testing Results

Results for January 2, 2016
 Next Test February 6, 2016
 Park District CRC; Sr. Center;
 Sunshine Room.

CLASS	NUMBER TESTED	NEW LICENSE or UPGRADE
Technician	2	2
General	0	0
Extra	1	1
Total	3	3



New/Upgraded Licenses:

****Technician****

Matthew King KD9FFV
 Charles Elms KD0FFW

****Amateur Extra****

Brandon Zaleiski N9BRZ

****General****

The SARC-sponsored VE exam sessions are held at 9:00 a.m. on the first Saturday of each month (unless it is a holiday or advised to the contrary by Schaumburg Park District) at
Schaumburg Community Rec Center (CRC)
505 N. Springinsguth Road
Schaumburg, IL 60168-0251

The CRC is located at the S.E. corner of Springinsguth and Bode Road, park in the North lot and enter through the North doors. Testing will be in the Sr. Sunshine Room, signs will be posted to guide the way to the room.

The fee for taking a VE exam is \$14.00.

According to the FCC, the test fee allows an examinee one attempt to pass or fail each of the three examination elements. In addition, the order in which the examination elements are taken is not restricted; they may be taken out of sequence.

As in the past, an identical fee will be assessed to any applicant who fails an exam and wants to retest at the same session. The only condition is that the same exam (identical set of questions) cannot be given to the Applicant, since all our exams are unique, this is not a problem at our sessions.

Tom Doyle K9MF
 W5YI-VEC CVE & Test Session Manager
 847-895-0174
 Email: K9MF@ARRL.NET

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SARC Email Reflector

Want to know what's happening in the club? Join the club's email reflector on Google groups. Point your web browser to: <http://groups.google.com/group/sarc-all>

Click on the Join this group link. You can use your current email account to sign up or create a free Gmail account.

You can elect to receive individual messages, a daily digest, or just read the messages on the Google Groups webpage.

Club Nets

Technical information net - Every Tuesday night at 7:30 pm. on the SARC Repeater 145.23 MHz.-600 kHz WITH 107.2 Hz PL. Bring your Q&A's

Thursday nights are the 2 meter general information net on the SARC Repeater 145.23 MHz.-600 kHz with 107.2 Hz PL. at 8:00 PM (except meeting nights.)

Club Meetings

Club meetings are held at the Schaumburg Recreation Center (CRC) on the southeast corner of Springinsguth and Bode roads. Our nets are held every Thursday (except Meeting nights) at 8pm on the K9IIK repeater; 145.23 MHz -600 kHz with 107.2 Hz PL.

Club Officers - 2016

President:	Steve Karson	AC9EM	Director:	Anthony Willard	AB9YC	(2016)
Vice Pres.	Russ Shmidt	KC9NUV	Director:	Rob Glowacki	N9MVO	(2016)
Secretary:	Cliff Sowka	K9QD	Director:	Kevin Willard	KB9QVX	(2017)
Treasurer:	Chris Brewer	AC9GN	Director:	Ted Lester	AB9SZ	(2017)
			Director:	Gary Bernstein	N9VU	(2015)

Club Committees

Programs	Cliff Sowka, K9QD	RHG	Anthony Willard, AB9YC
Social Activities	Roger Ryan, W9RDR	Publicity	Dirk Smith K9DFS
Membership	Leo Ribordy, N9NBH	Net	Jim Brink, W9JFB
Education	Bruce Warrington, N9EHA	Technical Assistance	Ted Lester, AB9SZ
Public Service	Rob Glowacki, N9MVO	Fund Raising	Open
Emergency Communications	Bob Langsfeld, WB9TZC	Fox Hunt Coordinator	Steve Karson, AC9EM
Special Events/Field Day	Leo/N9NBH, Jim/W9JFB	Repeater	Rob Glowacki, N9MVO



Schaumburg Amateur Radio Club

Thursday Night 8:00 Net
S.A.R.C. Repeater
145.230 MHz- 600 kHz
PL=107.2
442.275 MHz +5 MHz
PL=114.8 Hz

Don't forget to check into the net! It will only take a minute and will let other club members know how you sound on the club repeater. The net features current club news, weekly NEWSLINE, news from other clubs and (of course) the swap-and-shop. Encourage your friends who are not yet members to check in with as well. Keep in mind that this is an open net and we encourage everyone to check in. See you Thursday at 8p.m.

The Schaumburg Amateur Radio Club, Inc. is organized as a general not-for-profit

corporation in the State of Illinois to render public service whenever applicable to the needs of the community and further various pursuits of amateur radio as a hobby. Meetings are generally held on the third Thursday of each month. Visitors are always welcome.

Please send all submissions for the Radio Hill Gazette to the following address:

Schaumburg Amateur Radio Club, Inc.
790 Washington Blvd.
Hoffman Estates, IL 60169-3077

Or you can send by email to rhg@n9rjv.org.

We solicit letters, articles, news items, quizzes, advertisements, suggestions, and criticism – plus anything else you can think of, including ideas to improve the RHG! Please make submissions by the 20th of the month for inclusion in the next issue.

The editor reserves the right to edit submissions due to size or formatting limitations. S.A.R.C. shares newsletters with a number of other clubs. We

scrutinize their publications very closely to make sure that we do not infringe on any copyrights. As a matter of form, we try to acknowledge all prior sources.

Unless otherwise clearly identified as copyright protected, all material in the RHG may be used when due credit is given to the author and to SARC.

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Visit the SARC Home Page at <http://n9rjv.org>

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