

SARC

Schaumburg Amateur Radio Club

RHG July 2019 KD9AUP Bill's Magnetic Loop for 40m/30m/20m

By: Bill Crockett, KD9AUP

Here is a description of my homebrew loop antenna, together with photos of construction.



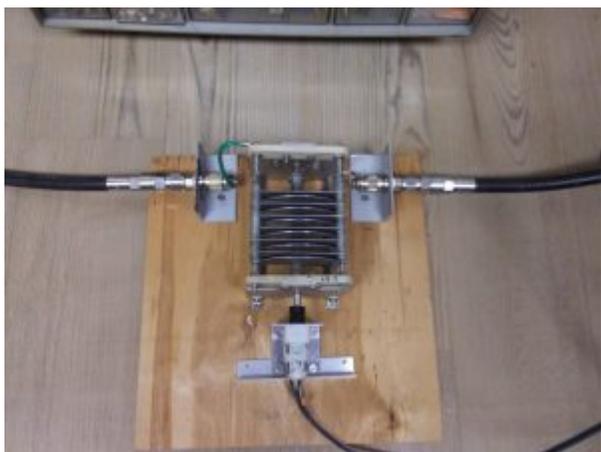
- 1) 16ft of Coax or other large low impedance cable or Pipe. (No connection is made to the Center conductor, only the shield.) (I used a left over piece of Heliax.) (5 ft diameter)
- 2) # 16 AWG Stranded wire wrapped around Coax 11 turns over a span centered at the top of 46 “



3) The connector in the middle is at the end of approximately 27 " wires

4) The turns were expanded or compressed to gain best SWR performance on 20 and 40 meters, middle of these is 1:1 to 1 at resonance (about 1;7 to 1 on the extremes for 20 and 40 meters).

5) Hamfest special Tuning capacitor \$10 good for around 2KV 20-320 PF. The capacitance on the high end (20 Meters was still excessive capacitance), I think around 5pf is more desirable up to around 165pf for the low end. I removed 7 sets of Plates to reduce capacitance, double spaced the existing plates to raise the voltage (Larger gap) then adjusted the offset from plates in the center to gain enough capacitance for 40 Meters. This was multi iterative to get best performance on both band edges. This was tested at 100 Watts no issues.



6) Motor mounting bracket out of .062 6041 aluminum I was off on my right angle bend so just used a piece of Right angle aluminum to space it up.

7) Flexible Resin based coupler for motor to capacitor, this can be easily be drilled to the diameters required for the Motor shaft and the Capacitor shaft.

8) Parts mounted on a 1/4 ' piece of scrap plywood w/ Sheet metal screws, feet on bottom as screws were longer than plywood so they protruded on reverse side. Use a plastic box for outside weather proofing.

9) DPDT Switch with a dropping voltage regulator to get enough voltage to the motor for torque and slow the RPMs down a bit to make tuning easier.

10) Capacitor position is quite critical to resonance, slower speeds would provide some better granularity, Capacitor is tweaked for max S units signal, or noise.

11) Initial tuning to find SWR's was done with an MFJ 259.

I am in hopes that others will explore this antenna and this provides yet another coupling approach using commonly available junk parts.

Regards,

Bill, KD9AUP

ARRL Field Day 2019 – June 23rd/24th

By: Mike Griffiths, KD9KMV



SSB Tent at night – Field Day 2019

The [ARRL Field Day](#) takes place every year on the fourth weekend of June, for a 24 hour period. During this event ham radio operators across North America demonstrate their ability to setup portable radio deployments in the field. Combining emergency preparedness skills, technical knowledge and teamwork, the [Schaumburg Amateur Radio Club](#) takes part in this annual event.

The weekend began late Friday afternoon for a small dedicated team, who aided in the initial setup of a rope pulley system at the top of the 120 foot tower, located at the club's main VHF repeater site.

Early Saturday morning, the rest of the club's volunteers arrived to set up tents, erect antennas, and get everything ready for the official 1pm start time.

The club operated under the 2A designation, with a CW station (tent captain Bob W9DXR), an SSB Phone station (tent captain Robert W9RKK), and a GOTA (Get On The Air) station (tent

captain Bob W9GEW) all running on portable generator power.

In the true spirit of Field Day, the CW team overcame some initial antenna and logging software issues, and despite also being cut off from power prematurely near the end, were still able to surpass their previous years score. Extra points were also achieved thanks to their use of battery/solar power.

With dinner and breakfast provided, nobody went hungry and operators were able to continue throughout the 24 hour period.

Thank you to everyone that volunteered their time, their equipment, and their knowledge, to make this event happen.

Here are some photos taken by several members over the course of the weekend:

Setting up





The CW Tent



The SSB Tent



The GOTA Tent



The Classroom!



Thanks again to everyone involved.

Independence Day Parade 2019 – Hoffman Estates, IL

By: Rob, N9MVO



A Public Service Event

Well, it's that time of the year, so less than two weeks after Field Day, the [Schaumburg Amateur Radio Club](#) had a Public Service Event: [The Hoffman Estates Independence Day Parade](#). It was a beautiful day for a parade. The temperature was not too hot, starting in the mid 70's, and warming up to the low 80's. There was a little breeze, to help cool the participants.

For those who wanted to do so, the Village provided breakfast at IHOP on Barrington and Hassell Roads, starting at 6:00 AM. The rest of us met at 7:30 AM on Paris, east of Illinois, near

the beginning point of the parade. After a short briefing, we scattered to various points, west of Illinois, where the parade units are staged to assemble in the correct order for the parade.

We had, not in any particular order: Matt KD9EBV, Frank N9QPD, Doug W9YFC, Leo N9NBH, Neil N9NL John KD9KSH, Sarah W9SEW, Ed AC9SD, Bruce N9EHA, Daryl KB9RHR, Robert W9RKK, Dennis KD9HIK, Jim KB9RGU, Cliff K9QD, and Rob N9MVO volunteering for the event.

Before 8:00 AM, we had the net control station set up a couple houses west of Illinois, on Newark Lane. The location is fairly central to the parade staging locations, and a sign post is a good place to bungee my antenna support mast. This time, I tried the new J-Pole I just made at the impromptu Construction project in mid June. The mast I use telescopes from less than 5 feet to about 20 feet. I only pulled it up to about 12 feet, but that had the antenna well above the top of the sign post.

The main reason for the antenna altitude is because Jim KB9RGU at the review station is much further away than the operators who are in the staging area. After some of our communication regarding parade units present or not, Jim said he could hear my net control station, but not any of the other stations. That is the reason I specifically call him to ensure that he knows what units are missing from their proper location.

Most of the parade units arrived in time to stage at their designated locations, but some were barely in time to get into the parade just before “The End”. Of course, our volunteers were able to get the various units present into the parade at their designated location, but those late comers were identified, and their identification was sent to the Review Station, so they could get their performance reviewed.

After the parade finished, the spectators headed back home, the parade units got back in their vehicles, and the hams headed back home. The sun was still up, the rain had held off, and as it turned out, the day was beautiful for celebrating the Independence of the United States.

73 de N9MVO,

Rob



Photos provided by Robert, W9RKK

SARC in the Park – July 13th, 2019

By: Mike Griffiths, KD9KMV



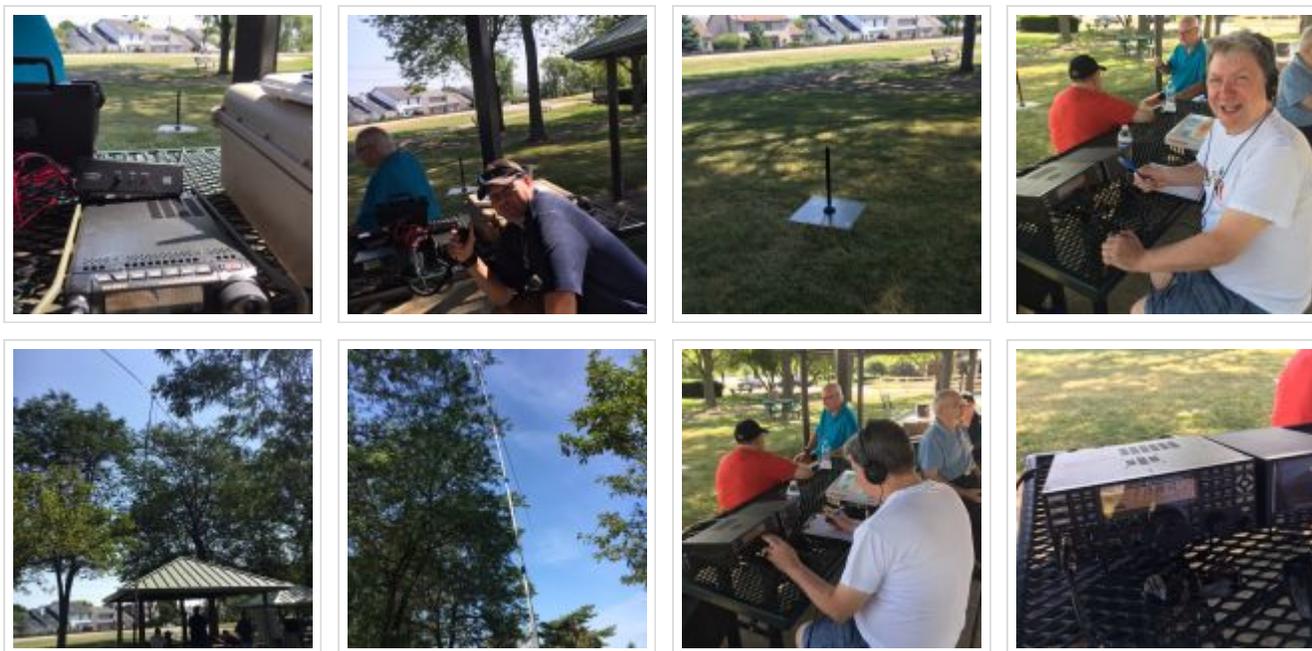
Picnic Shelter with 20m dipole

On Saturday July 13th, the weather was perfect for playing radio outside, with blue skies and sun. Some of the [Schaumburg Amateur Radio Club](#) members made the most of this great weather and met for another [SARC in the Park](#), held at the [Schaumburg Community Recreation Center](#).

Kevin, KD9MKD arrived with a box of donuts and his Yaesu ATAS-120 antenna to test out. Three radios were in action: Robert W9RKK's Elecraft K3, and Mike KD9KMV's Icom IC-703/Yaesu FT-891 combo. Later on Bob W9DXR was testing his Elecraft K1 with a telescopic fishing pole to support his wire antenna.

Contacts were made across the US, South America and Europe, covering bands from 40m through to 6m.

Here are some more photos taken during the morning.



For more information about this regular club event, please check out the [SARC in the Park](#) link.

Volunteer Opportunity – Schaumburg Triathlon

This public service event is the largest one that the club handles each year. We are the eyes and ears on the course for the Schaumburg Park District during their annual Triathlon. Fifteen to Twenty members are needed to cover the 12 mile bike route and the 5k run. A fully charged HT is sufficient for this event, which makes use of the club's repeater to help cover the entire course.

Date: Sun. July 28, 2019

Time: 6am – 12pm

[Roselle and Weathersfield, Schaumburg](#)

Club members should monitor [SARC-ALL](#) for details on signing up.

Location

The location shown below is our meeting point before the event begins. Please meet here and you will be dispatched to your point along the route.



Technician License Training Class – Fall 2019

The [Schaumburg Amateur Radio Club](#) will be holding entry level Technician Class License training sessions at the [Schaumburg Township District Library – Hoffman Estates Branch](#), starting on Saturday, September 7th 2019 from 10:15am to 12:15pm.

Date: Saturdays Sept 7-Oct 26

Time: 10:15am – 12:15pm
[Hoffman Estates Library](#)

[Click here to register](#)

This 8 week class will prepare you for the entry level Amateur Radio Technician Class license test, allowing you to operate on the UHF/VHF bands and a small portion of the HF bands. The

class will be taught from the [ARRL Ham Radio License Manual \(4th edition\)](#). We highly recommend that you have a copy of this book for the class.

When you are ready to take the test, The Schaumburg Amateur Radio Club also sponsors the [License testing sessions](#).

Location



Schaumburg Amateur Radio Club Board of Directors Meeting July 3rd, 2019

Board of Directors Meeting

3 July 2019

Chairman Leo Ribordy N9NBH called the meeting to order at 7:00 pm. With only two Board members present and three absent, there is not a quorum.

Attendees:

Geoff Stevens KA9QGH///Ken Krzywicki KD9HIJ///Danny Kafka KD9HIL///John Zietlow K9WIC

Edward Lishka AC9SD///Frank Giampa N9QPD///Leo Ribordy N9NBH///Dennis Calvey KD9HIK

Cliff Sowka K9QD///Bob Langsfeld WB9TZC

Without a quorum there was no official business to conduct. A general conversation ensued covering various matters.

There won't be a Thursday night net due to the holiday. Leo N9NBH will send out an email to that effect.

A discussion about the next Field Day ensued with Geoff KA9QGH saying that it was his intention to nominate/appoint himself Field Day Chair at the next club meeting. Dennis KD9HIK has volunteered to be Vice Chair. The general feeling is that we need to be more proactive in this activity and start making plans early on for the next event. It was noted that Bill Clark's invitation to Field Day somehow slipped through the cracks. He had made mention of the omission to one of our members.

Cliff K9QD and Rob N9MVO visited the home of a silent key and met with the executor of the estate. Apparently there is a vast amount of ham gear packed into the basement and garage of the residence that would take about ten volunteers and several small trucks to clear the area.

The club would stand to profit from this venture, but it is estimated to take about one year to move, process and dispose of it through various ham fests, eBay, etc. More information will come on this.

Ken KD9HIJ has been in contact with the Township supervisor reference the tower they are donating to SARC. The crane has removed the tower from its base and it's now on the ground waiting for us to dismantle and cart away. Geoff KA9QGH has signed off on the hold harmless waiver and that will be forwarded to the Township supervisor via email by Ken. An email has been sent out requesting volunteers for this project which hopefully will happen this Saturday 6 July at 10:00 am. The tower is located at Landmeier and Tonne roads in Elk Grove Village. The facility is across the street from the US Post Office.

With no further discussion taking place, Leo N9NBH closed the meeting at 8:38 pm.

Nets:

Tech Net:

On 7/2/19, Mike K9KQX handled the net. Sign ins included:

Steve KD9SH///Kevin KD9MKD///Ron KD9IPO///Robert W9RKK

Doug W9YFC///Steve AC9MM///Dave KD9LEV///John KD9KSH

Nathan K9TIV///Don KD9NJR///Mike KC9SOA///Roberto WA9E

Weekly Club net:

On 7/11/19 Leo N9NBH handled the net.

Sign ins included:

Robert W9RKK///Rob N9MVO///Ken KD9HIJ///Mike KD9KMV///

Larry KD9EYX///Ed AC9SD///Doug W9YFC///John KD9KSH

Don KD9MJR///Steve AC9EM///Bob W9DXR///

John K9WIC///Roberto WA9E///Jeff KD9SGT

Anatoli AC9VI///Leo N9NBH

VE test results for July, 2019:

As reported by John Schofield AC9JS:

Name:			Class:	
Robin	KD9NDR	General	Technician	4
Robert	KD9NMC	Technician	General	3
James	KD9NMD	Technician	Extra	0
Michael	KD9NME	General	F.T. U.	1
Stanley	KD9NMF	Technician		
Kevin	KD9MKD	General		
Scott	KD9NMG	Technician		

Participating VE's:

Tom: K9MF

Bill K9WKD

Steve AC9EM

Ed AC9SD

James KC9UFB

John AC9JS

Next exam date is August 3, 2019

Number of candidates tested so far this year: 50 (includes July 2019)

Respectfully submitted, 4 July 2019

Ken Krzywicki KD9HIJ

Secretary

Schaumburg Amateur Radio Club Business Meeting July 18th, 2019

Schaumburg Business Meeting 18 July 19, 2019

Vice President Danny Kafka KD9HIL called the meeting to order at 7:00 pm. There is a quorum.

Tonight's question was; have you had any experience with EME, and what were you doing during the moon landing 50 years ago. Several good stories ensued.

Rebecca KA9EFE brought the snacks. As always they were very good.

Attendees:

Ken Krzywicki KD9HIJ///Danny Kafka KD9HIL///Chris Brewer AC9GN///Leo Ribordy N9NBH

Cliff Sowka K9QD///Robert Kocourek W9RKK///DJ Traxler WA9UBR///Edward Lishka AC9SD

Doug May W9YFC///John Douglas KD9KSH///Burt Schultz AB9CV///Phil McBride WB9C

Frank Giampa N9QPD///Rick Dickens KY0Q///Don Smith K9UD///Daryl Jenks KB9RHR

Terry Jurnholm AE9TJ///Bill Crockett KD9AUP///Mel Luxenberg W9FRT

Chuck Billstrand KB9RGI///Dave Sims K9KBM///Paul Burkett KD9FMN

Bob McIntyre W9DXR///John Schofield AC9JS///Steve Karson AC9EM///Bob N9JAX///

Don KD9NJR///Rob N9MVO and John K9WIC.

Treasurer's Report:

Chris AC9GN provided the report covering 6/1/2019 through 6/30/2019.

Beginning balance: \$5146.90

Income: \$969.05 (dues)

Expense: \$119.28 (\$61.53 data line, net raffle prize)

Ending balance: \$5,996.70

Current number of paid members: 55

A motion to accept the Treasurer's report was made by Frank N9QPD, and with a second by Steve AC9EM, the motion passed.

President's Report:

Geoff KA9QGH was unable to attend the meeting. No report.

Secretary's Report:

After breakfast at Maxfield's July 6th, eleven volunteers went to Elk Grove to dismantle and cart away the donated tower. It took about an hour to take the sections apart of the 55 foot Rohn 45 tower. Once loaded on to Leo's N9NBH vehicle, it was transported to the tower site on Plum Grove road and secured to the top of the POD. Beginning to end, time spent was two hours. It has been suggested that at the ham fests a sign be posted advertising the tower for sale.

A Motion to accept by Frank N9QPD, seconded by John AC9JS, Motion Passed.

Publicity:

Dennis KD9HIK related that he had notified several media outlets about the upcoming Technician class, including ARRL.

EMCOMM:

John K9WIC is looking for help with the Hoffman Estates Race which occurs this coming Saturday, July 20th. He will put out a SARC All requesting volunteers. It will start early and end about 2:00 pm.

EBay Sales:

None.

SARC repeaters:

Terry AE9TJ reports that the repeaters are coming along. Rob N9MVO noted that a jammer had sent a deliberate tone. There was some discussion about changing codes. More information to come on this.

Public Service:

Rob, N9MVO reminded the group about the upcoming Schaumburg Triathlon which includes swimming, cycling and a run, scheduled for July 28th. To sign up to help, email Rob who is

looking for 15 to 20 volunteers. This is the Club's very important activity as the Schaumburg Park District has, and still, provides the Club with locations for our activities at no charge.

Education:

Leo N9NBH has scheduled a Technician Class beginning September 7th and ending October 26th at the Hoffman Estates branch of the Schaumburg Library. Class time runs from 10:30 to 12:30 on Saturdays. There is no charge for this class. Participants should have purchased the Technician Manual prior to class. The manual is available via ARRL. The following Saturday, November 2nd, the class can take the exam at the VE site.

Nets:

There was a suggestion that the Control Operators for the nets be put on the Club calendar.

Programs:

Bill KD9AUP is working on it.

SARC in the Park:

Rob N9MVO said that there were twelve participants on Saturday July 13th, and it was a fun day. Participants included:

Dennis KD9HIK///Ken KD9HIJ///Robert W9RKK///Ron WB9PTA///Kevin KD9MKD///Carlos KD9NLK///

Rob N9MVO///Mike KD9KMV///Bob W9DXR///John KD9KSH///Don K9UD///Gary N9VU.

Social:

John KD9KSH had no report.

News Center:

No report.

Membership:

Bob N9JAX had one contact this month.

Old Business:

Cliff K9QD and Rob N9MVO had visited the home of a silent key whose brother offered the Club all the equipment stored in the house and garage. The area was jam packed providing little access. After many discussions it was decided to forego the offer. Our resources would have been severely impacted.

New Business:

One of the Board of Director's has resigned his position due to job related issues. Peter N9POL has moved on, leaving the Board a member short. Both Burt AB9CV and John KD9KSH have volunteered to take over. Both have been invited to the next BOD meeting where one will be appointed to finish out the term and another in the near future due to another Board member possibly leaving.

Health and Welfare:

Bill KD9AUP tells the group that Kent W9KAO is still home "flat on his back" recovering from the automobile accident that totaled his car and injured him.

Ask An Elmer:

Inside joke between Rob N9MVO and Cliff K9QD about a current balen?

Motion to Adjourn:

With no further business to conduct a motion to adjourn was made by Cliff K9QD. A second was made by DJ WA9UBR. Motion passed at 8:05 pm.

Guest Speaker Mel W9FRT gave a presentation on a quad antenna. That generated a lot of questions and answers that was very informative. What made the presentation even better was the interspersed stories of his time on a ship in the Pacific during the time he served.

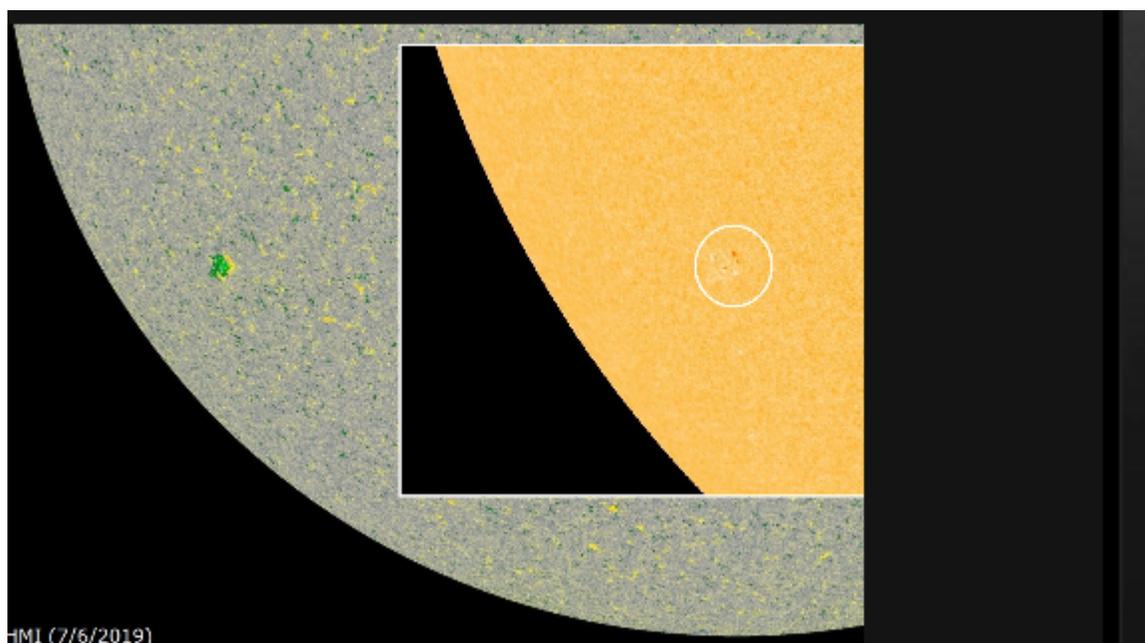
Respectfully submitted 19 July2019

Ken Krzywicki KD9HIJ, Secretary.

From the President July 2019

From the President,

There is not much to report on here in Wisconsin, hopefully the new home of my ham-shack soon. I was unable to get to the July meeting due to unforeseen physical issues that just won't go away. However, there is good news for all of us HF radio geeks. On the face of the sun this week, the first sunspot of the new Solar Cycle 25 was detected. This was a small sunspot located, in a high latitude, and it had the magnetic polarity to give an indication that this was the first spawn of the new cycle. Why is this important?



Courtesy of SolarHam – <http://www.solarham.net>

Why does anybody care? The reason this is special is because it is a year or two early. This was completely unexpected as we have not hit rock bottom of solar cycle 24 yet. So, we can expect to see cycle 24 and 25 sunspots interspersed on a gradually increasing scale going forward. This could mean that we may see more sunspots than in Cycle 25 than we did in Cycle 24. Fingers crossed.

Geoff Stevens

KA9QGH

