



KARS KEY KLICKS

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June 2009

JUNE PROGRAM USING UI-VIEW32 WITH APRS PLUS A DEMONSTRATION OF WINLINK 2000

The next KARS meeting will be Tuesday, June 2nd, 7PM at the usual St. Mary's Hospital meeting room.

The plan is a live demo of both UIView32 with APRS by Clay N9IO and of the WINLINK 2000 Global Radio E-Mail System by guest speakers Eddie K9EEW and Art N9ZZK of Grundy Co ARES. Read more about both at www.ui-view.org and www.winlink.org. This is a digital program you don't want to miss! Hope to see you all there.



Jerry WB9Z describing the "Dxpedition of the year" to Desecho Island to a packed house at the May KARS meeting

KP2 OPERATION

KARS member Carl K9CS will be joined by K3VX, W3WH, W3WN and W9UK. They will sign their homecalls/KP2 until June 2. This includes being QRV as NP2SH as a Multi/2 entry in the CQWW WPX CW contest. QSL W3WN/KP2 to home call and all others via K9CS. In addition, Carl K9CS will also be active on 6 meters on May 28 and 29 and June 1 and 2. QSL to home call.

Note that Carl K9CS and Larry K3VX were joined a bit over a year ago by Don K9NR, Will K9FO and Greg WR9L on an expedition to Montserrat for the ARRL 160 Contest and the CQWW DX CW Contest. Howard AK9F had to cancel at the last minute. However, he kept in daily contact with the crew and helped them figure out some perplexing antenna problems.

NCS FOR JUNE

The net meets every Monday at 2100 hours local time. All stations with or without traffic are invited to check in.

KC9FAV	June 1st
N9LYE	June 8th
WD9AYI	June 16th
KE9MG	June 22nd
WD9FYF	June 29th

Don't forget the net!

KARS KALENDAR

June 2.....	KARS General Meeting
June 7.....	Starved Rock RC Hamfest
June 13-15.....	ARRL VHF QSO Party
June 16.....	KARS Board Meeting
June 21.....	Six Meter Club Hamfest
June 27-28.....	ARRL Field Day
July 7.....	KARS General Meeting
July 11-12.....	IARU Radiosport Championship
July 12.....	Fox River Radio League Hamfest
July 19.....	KARSFEST!!!
July 18-19.....	NAQP RTTY Contest
July 21.....	KARS Board Meeting

The Kankakee Area Radio Society operates repeaters on:

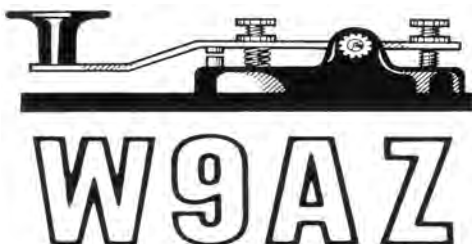
146.34/.94 107.2 PL Access
449.8/444.8 114.8 PL Access

Also, co-sponsors:

145.130 107.2 PL Access

Additionally, KARS sponsors:

144.39 Wide Area APRS digi-peaters
Kankakee and University Park
145.53 KARS DX Cluster



FIELD DAY

What is the largest operating event in ham radio? ARRL Field Day of course!

KARS Field Day preparations are well under way. The event will once again be hosted by Kevin N9REG, at his beautiful, rural location southwest of Kankakee. Take Rt. 115 west, then 3 miles south, then about 1.5 miles west again and you are there! Talk in on the 34/94 repeater.

Club members who participate in the event will be treated to a steak dinner. Make your reservations now with Will, K9FO. Bring your own tableware, beverages, **chairs**, as well as a side dish or dessert to share. If you have an extra grill, it would be helpful and speed up cooking time. Extra tables might also come in handy.

Field Day officially runs from 1PM CDST Saturday, June 27th to 4PM CDST Sunday June 28th. If we set up ahead of time (we do) we can operate 24 of the 27 hours.

As usual, we will be setting up 10 AM Saturday morning, commence operation at 1PM and continue through till 1PM Sunday. You may stay the entire weekend or come and go as your schedule permits.

(cont. on pg. 3)

HAPPY BIRTHDAY

N9OQC	June 10th
KF9DM	June 26th
W9IOU	June 26th
K9BAK	June 30th

If we miss your birthday or get it wrong, please let us know!

It's Summer and that means...FieldDay!!!

KARS HOMEPAGE—WWW.W9AZ.COM—KARS HOMEPAGE



A SIMPLE 3 ELEMENT SIX METER YAGI

by John N9LYE

With the coming of the Summer months, VHF and UHF band openings are becoming more frequent. Perfect time to put that 6 Meter band in your new HF rig to good use. Since many of the newer rigs include 6 Meters, all that is required to get on the band is a simple antenna. Easier said than done, you say? Not entirely true. One trip to the local hardware store and some basic hand tools are all that's required to build a 3 element, direct feed Yagi. With many thanks to Howard AK9F, who computer modeled this antenna and several variations of my 2 meter Yagis, I began my adventures. I usually averaged less than 24 hours between the time of his e-mail hitting my Inbox and the antennas being built, tuned and mounted on the tower ready to make contacts!

The boom starts out as an 8 foot long wooden 2x2 and the elements are three 10 foot lengths of 1/2 inch electrical conduit. One inch sheet rock screws are used to secure the director and reflector to the boom. However, the driven element is mounted differently using two inch screws, although you may choose to mount the director/reflector in this same manner. Both types of mounts survived a 70 Mph wind gust from a tornado that passed a mile south of me last year!

Begin with cutting the boom to 81 inches. Don't throw away the piece you just cut off, you will be needing that later. Measuring one inch from the end, make a mark on the boom. This is where the center of the reflector will be and all measurements are referenced from the center of each element to the next. From that point, make a mark at 42 inches. This is where the driven element will go. The next mark is absolutely critical! Exactly 37 inches from that point is where the director will be mounted. Errors in spacing between the directors and the driven element can radically impact tuning and performance, unlike that of the driven element and the reflector. This is one lesson I learned the hard way.

Using a 5/8 inch wood bit, drill through the boom where the director and reflector will be attached. Later, a small hole will be drilled in the top and thru the elements for a screw to keep them from sliding out. A small round wood file may be used in the holes if the element fit is too tight. Remember that piece you cut off the end? Cut off a 2 inch piece to attach to the side of the boom, centered on where the driven element will be mounted. This will provide a wider mounting space for the driven element and coax. See Figure 1 for details. The remaining 12 inches will be used later on the Boom to Mast clamps. Starting with the reflector, cut one length of conduit to 116.5 inches, mark the center and slide into the boom. Drill a small hole down thru the boom and element and insert a 1 inch screw. Cut another length to 104.25 inches to be used as the director and do the same. The third and final is the driven element. Cut two 56 inch sections and insert an insulator, like a dowel rod of wood or fiberglass, leaving a one inch space between the two halves. The nice thing about conduit is you can solder to it! Sand off the ends by the insulator, solder an eye terminal to it, then drill down thru the holes. This way, you have an easy place to connect the coax and a way to connect the element to the boom.

Speaking of coax. There are two methods to transform the 30 ohm feed point to 50 ohm coax. Without this transformation, the SWR will be around 1.7 to 1. The first method is a 58 inch section of RG-8X is connected directly to the driven element, followed by a 19 1/2 inch section of RG-6 (not RG-59) to which the 50 ohm coax of any length is run down to the rig. Both the RG-8X and the RG-6 are foam types. Using any other types requires the lengths to be adjusted, compensating for the velocity factor of the lines. This can safely handle up to 500 watts PEP. For those of you that want to run higher power, the following might be better. The second method is the DK7ZB-Match (<http://www.qsl.net/dk7zb/dk7zb-match.htm>). I have tried this on several antennas, even without grounding the coax socket to the boom or mast, and it worked very well. Regardless of which method you use, always wrap the coax near the feed point into a choke balun of approximately seven turns. Conversely, wrap it around the boom as I did. It's a simple way to reduce feedline radiation and pattern distortion.

Getting back to that last 12 inches of wood left over from the boom, cut it in half and mount it above and below the center of balance on the boom. This is where the holes are drilled and the mast clamps are inserted. It may have to be mounted slightly back from center, behind the driven element and choke coil, but will provide plenty of support if both clamps are used.

Once its all assembled, time to put some power to it. The driven element will be slightly long and will need to be trimmed, equally on each side, a quarter of an inch at a time, until the minimum SWR is at 50.140 MHz. Now after all of that is done, disassemble the antenna and seal all the exposed wood, including the dowel rod used in the driven element. I used 3 coats of stain and polyurethane mix, even pouring it into any drilled holes to keep out moisture (*spar varnish is a good alternative...ed*). Reassemble and retest after it dries. After spending part of my weekend rebuilding mine onto an oak boom and putting it back up at 35 feet with some fresh coax, my first contact was with a mobile in New Mexico...and I was only running 10 watts from an Icom IC-551. Not bad for about \$15 in parts and a couple of hours of my time.

	Element Length	Location on Boom
Reflector	116.5"	0
Driven Element	112"	42"
Director	104.25"	79"

KARS HOMEPAGE— **WWW.W9AZ.COM** —KARS HOMEPAGE

More great photos of KARS members doing what they do best...having fun!

At the May club meeting...



SRO turnout at the KARS May meeting to hear WB9Z's special presentation on the Desecheo Island DXpedition



Noted DXers Jim Mornar N9TK and Al Keck W9YYG drove down to enjoy WB9Z's program

FIELD DAY (CONT)

Field Day GPS coordinates:

N41 03 43

W87 56 00

Important Times:

Saturday 10AM—Setup

Saturday 1PM—Official Start

Saturday 5PM—Steak Cookout!

Sunday 8-9AM—N9MBR's breakfast!

Sunday 1PM—Tear down

Note that we need the most personal at setup and tear down.

Things to Bring:

Folding Chairs

Dish to Pass

Table Service

Favorite Condiments, sauce

Favorite Soft Drink

Bug Spray

See you at Field Day!

May 23 CQ WW FW Transmitter Hunt



Resourceful fox N9IO reads from the latest issue of CQ magazine while N9IOQ looks on



National Foxhunt Weekend winner K9NR poses with his hunting antenna next to the "found" fox



Young but experienced hunters W9IOU and beau K9UNO (big 2008 winners featured in CQ magazine's May 2009 issue)



A gathering of Eagles???
Group shot of the hunters at the May 23rd hunt

CQ WW FW RESULTS

The first KARS transmitter hunt in 2009 featured Clay N9IO and XYL Cindy N9IOQ as the fox. Due to conflicts, we were short a couple of hunting teams. However, we still had a great hunt on a beautiful spring day.

Wiley fox N9IO found a nice hiding spot in the Kankakee River State Park. Don K9NR took the winning spot by finding the fox in the shortest distance. Also finding the fox were Billie K9QT and the team of Crystal W9IOU and Rodney K9UNO

KARS transmitter hunt coordinator N9IO is planning the next hunt date. Monitor the repeater or the Monday night net for the latest hunt plans.

EXAM SESSION RESULTS

By Carl K9CS

At our testing session on May 21st we had one person qualify for a new Tech license, Melissa Meredith, wife of Chris Meredith, W9CJM (ex KC9OQM.) We also had someone fail to upgrade to Extra. (missed by 1 question!) (bet they won't miss the next time!...ed)

VEs were Mike KC9HHT, Tim W9TRF, Sam W9QKF, and Carl K9CS.

WANTED

Looking for a 440mHz mobile rig.
Contact: Art Reis K9XI
areis@crawfordbroadcasting.com