



KARS KEY KLICKS

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October 2009

ANNUAL AUCTION AT KARS OCTOBER MEETING

The Next KARS General Meeting will be Tuesday, October 6th, 7PM at St. Mary's Hospital meeting room.

After the usual short business meeting, there will be the always popular KARS Auction. Will K9FO and Dan WA9WAQ will be performing their "Dueling Auctioneers" routine for the enjoyment of all.

Be sure to cull through your radio/electronic/computer/etc goodies and bring some "junque" to sell!



Ken W9YNI (L) describes his new homebrew vacuum variable controller to Will K9FO ® at the September KARS Meeting

NCS FOR SEPTEMBER

KC9FAV	October 5
KE9MG	October 12
N9LYE	October 19
WD9AYI	October 26

Don't forget the net!
Mondays at 2100 hrs. local time

HAPPY BIRTHDAY

KC9NIA	October 4
K9KOC	October 7
WR9L	October 13
N9YNZ	October 14
K9IOC	October 15
KB9ZQU	October 24
K9NR	October 26
WB9CDE	October 26
N5HSR	October 27

Let the newsletter editors know
if we miss your birthday or get it wrong

ILLINOIS QSO PARTY 2009

Plans for the Illinois QSO Party are shaping up nicely.

Planned KARS operations:

WR9L Ford/LaSalle County

K9NR Kankakee County

NV9X Cook County

N9LYE Will County

N9IO Kankakee County

While not confirmed at this date, several other KARS members are planning operations from Kankakee and Iroquois Counties

The ILQP will be held on October 18th. Actually, it runs from 1700Z 10/18 to 0100Z 10/19. In other words, Sunday afternoon from 12PM to 8PM.

For complete info check the web page at:

<http://www.w9awe.org/ILQP2009.html>

Last year KARS placed near the top in this fun event. Lets give it all we've got this year.

When you send in your log be sure to indicate your club affiliation as **Kankakee Area Radio Society** and not SMC (this contest only).

KARS KALENDAR

Oct 6.....	KARS General Meeting
Oct 18.....	Illinois QSO Party
Oct 20.....	KARS Board Meeting
Oct 24-25.....	CQWW SSB DX Contest
Nov 3.....	KARS General Meeting
Nov 7-9.....	ARRL CW Sweepstakes
Nov 14-15.....	WAE DX Contest RTTY
Nov 17.....	KARS Board Meeting
Nov 21-23.....	ARRL SSB Sweepstakes
Nov 28-29.....	CQWW CW DX Contest
Dec 4-6.....	ARRL 160 Contest
Dec 11-13.....	ARRL 10 Meter Contest

The Kankakee Area Radio Society operates repeaters on:

146.34/.94 107.2 PL Access

449.8/444.8 114.8 PL Access

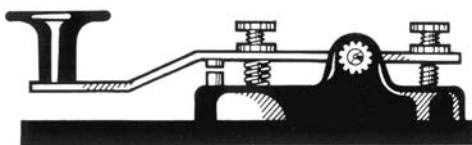
Also, co-sponsors:

145.130 107.2 PL Access

Additionally, KARS sponsors:

144.39 Wide Area APRS digi-peaters

145.53 KARS DX Cluster



W9A Z

**Is your ARRL
membership current?**



W9YNI FINALLY GETS ON 6 METERS

Back in the OLD Days it was suicide to get on six meters. Six was too close to channel 2 on all the neighbors' TV's and it was easier to stay away than to cause trouble. After a lot of verbal abuse by Howard AK9F, I finally put up a six Meter Beam and even made a contact in Florida on a dead band. Above is a Picture of the 3 element beam on my tower at 70 Feet. I am sure there will be a lot of fun in the future on six, but I guess I missed the big band openings this summer. Next year, I will be ready. de...Ken W9YNI

KARS HOMEPAGE— WWW.W9AZ.COM —KARS HOMEPAGE

A HOMEBREW 2 METER SSB/CW BEAM

By John N9LYE

My original intent was to build a small horizontal Yagi to be used on 2 Meter SSB/CW that could be rotated by a light duty rotor. Even though the first design had reasonable forward gain, it lacked front to back rejection resulting in marginal performance. With many thanks to Howard, AK9F, who was able to computer model this antenna (this one being the very first of three on this band) thus improving its performance while reducing the length of the boom from 3 feet to 29 inches and increasing the bandwidth to cover nearly the entire band.

Unlike most other Yagis on this band, this one uses one inch diameter tubing and a 2x2 wooden boom. How you chose to mount the elements to the boom is up to you. My last article, "A Simple 3 Element Six Meter Yagi" (<http://www.w9az.com/Newsletters/KARS-June-09.pdf>), provides details on element mounting and the dipole driven element.

When mounting vertically, the boom is extended at least 6 inches behind the reflector to allow side mounting on a tower. It is recommended that the boom be extended to attach to two tower legs for better stability due to the weight of the elements and the use of a wooden boom.

When mounted horizontally, the mast clamp may be positioned directly behind the driven element and the boom shortened to 29 inches. Mine was stacked on the mast 5 feet above the six meter Yagi with no apparent interaction between the two antennas.

Because of the close spacing of the elements, the feed point impedance is closer to 24 ohms.

There are several methods of tuning out the reactance of the dipole driven element. One of the more commonly used methods is an open stub of 300 or 450 ohm twin lead attached to the feed point at one end and taped along the boom opposite the direction of the coax. Starting with a length of 18 inches and trimming off a 1/4 inch at a time should result in a nearly perfect match. Final length will be somewhere between 14 to 17 inches.

One of the problems associated with twin lead and windowed ladder line is that tuning will be affected when it becomes wet from rain, snow and ice. An open stub made from 12-gauge solid copper wire or small diameter tubing reduces these effects. Spaced one inch apart and one inch above the boom using a stand off at the far end for support was used on many types of HF and six meter monoband yagis years ago.

On air tests proved very encouraging. Stations out to 50 miles were easily worked on SSB with the antenna mounted horizontally 20 feet up and only using 10 watts. During one band opening that lasted several days, stations as far away as 500 miles were worked on both SSB and FM.

Rotating the antenna vertical and pointed towards the repeater not only helped overcome path loss but also improved rejection of other repeaters on the same frequency during a band opening. This proves to be very beneficial during a SKYWARN Net.

	<u>Element Length</u>	<u>Location on Boom</u>
Reflector	39-1/4"	Zero
Driven Element	38-3/4"	14-1/2"
Director	34"	27"

Spacing is center-to-center of each element.

W9KVR BAGS DXCC AWARD

Congrats to Troy W9KVR on receiving his DXCC award! He adds this accomplishment to his recently received WAS award. He also has been successful at bringing new hams into the hobby from the student body at Glen Raymond School where he is a science teacher. Apparently, Troy likes ham radio as much as caving!



Close-up view of the stub-style feed system



Another AK9F design/N9LYE construct collaboration



The finished antenna in position on the tower

K9NR RECEIVES DX CHALLENGE PLAQUE

Kudos to Don K9NR on receiving his DX Challenge plaque. Apparently, Don also likes ham radio as much as caving!