

Spurious Emissions

Orleans County Amateur Radio Club

January 2010

OCARC Meetings

The OCARC meets at **7:30 PM** on the **2nd Monday** of each month at the Orleans County Emergency Management Office (14064 W. County House Rd. Albion, NY)

The exceptions are the August (picnic) and September (dinner) meetings

Club Officers

President

Stephen W Maier KZ2R

Vice President

Howard Flint KC2EZJ

Secy

Charles Lind N8CL

Treas

Richard Toussaint
KA2BCF

Dir

Bruce Sidari WA2TMC

Net Mgr

Marion Toussaint
KA2BCE

OCARC Meeting January 11, 2010

WHERE: *EMO*

*vertical antennas.
Funny you mention
that I said.*

*meter antenna and
had a stack of this
tubing.*

WHEN:

January 11, 2009

*I was planning just
such a program for
January.*

*With a few added
parts Wayne built a
very efficient vertical.*

TIME: *7:30 PM*

Program:

*This month we have
a very interesting
program on Vertical
antennas.*

*We have all seen the
"green Army sur-
plus" aluminum tub-
ing for sale at ham-
fests.*

*He has some great
pictures of the con-
struction process.*

*Last week AA2NA
was visiting my
shack and men-
tioned he would love
to see a program on*

*It usually sells for \$4
- \$6 per five foot .
length.*

*This is an efficient,
no compromise, low
real estate antenna
that is capable of a
ton of DX contacts.*

*Wayne N2WK
needed a second 40*

Come and see!!!!!!

2010 OCARC RTTY Team! Beats 2009 score by 50%

With the addition of Andy KC2HZM and Terry KC2JKU last year's team of N8CL, N2WK, AA2NA and WA2TMC increased the OCARC club competition score in the 2010 ARRL RTTY Roundup by approximately 50% over our 2009 results.

We compete in the "Local Club" category which allows up to ten club members to

pool their scores and compete against other clubs around the US. In fact last year we beat the Rochester DX Association. We will have to wait to see how they did this year. It was a great club event that we want to continue and hopefully add some more operators for 2011. We can still enter four more logs.

Actual results should be announced at the January meeting!

ANTENNA RAMBLINGS by AD7DB

These are the opinions of AD7DB I haven't verified for accuracy but he makes some very good points

My Thoughts on the G5RV antenna

I keep hearing various hams saying they want to go out and buy a "G5RV Antenna." To help clear up some misinformation, G5RV is not a brand of antenna, like a Cushcraft, Butternut, Smiley, GAP, Spider, Force 12 or whatever. The antenna commonly referred to as the G5RV is a design by Louis Varney G5RV. Although various manufacturers offer this type of antenna ready-to-go, it's something you can probably build yourself for a lot less.

The G5RV is a doublet, 51' each side of center (102' along the flattop), with about 35' of twinlead or open wire feeder going to a 4:1 balun, and with coax the rest of the way into your shack. The length on top is about 1.5λ for the 20m band. The twinlead can be 450Ω ladder line, or open-wire feedline.

My feeling is that this is just a specialized version of an extended double zepp, optimized for the 20m band. You'd probably be better off to use balanced twinlead all the way to the antenna tuner in your shack, because of these things:

- * No coax in the feedline means no coax losses. The impedance may be high, but you won't get very much loss in this case. The tuner can take care of the mismatch.
- * The radiating part of the antenna will just be the flattop, not the feedline. The high-current areas will be way up on the wire, not closer to the ground.
- * Your tuner can tune the antenna to resonance on the desired frequency, not just help simulate 50Ω load to your transmitter.
- * You'd probably need to use a tuner to use the G5RV on anything other than 20m anyway.

There is nothing particular special about the flattop length, but your best gain will be on the band where it's around 1.5λ (or, 3 half-waves). Flattop lengths as short as 44' can be used for 40-10m, and 88' for 80-20m. The world from Los Angeles. [Click for a larger image.](#) These give the same directivity broadside to the wire, in case you're intentionally aiming the wire you strung up for a desired coverage pattern. There's no reason you can't use the 88' one on 17-10m, but on the upper bands you start getting lobes going off in different directions. This may not be undesirable, because you're likely to get good gain from such an antenna anyway.

My opinion is that the G5RV looks like a good design, and he argued well for its merits. But the requirements of specific lengths for the feedlines and flattop, and a balun, make it too site-specific for me. It has to be set up under optimal conditions, and I just don't have the space it needs. These reasons and others may account for why some people have reported less than perfect results using the G5RV versus a dipole.

HF Horizontal Loop Antennas

The horizontal HF loop has been around for many years. It seems to get reinvented from time to time. One of the most popularly quoted articles is the one by Dave Fischer W0MHS about the Loop Skywire, in the November 1985 issue of QST. Yet, others claim to have developed it independently, such as the German Quad by DL3ISA. (There was an article once in 73 about DL3ISA's version, but I can't find what issue it was in.) You can also find many references to such terms as cloud warmer, cloud heater, and cloud burner. Sometimes an article will claim it was invented by some bored OM, who decided to turn his 80 meter vertical loop to point straight at the sky, and "accidentally" discovered what great qualities it has! Golly gee!

From what I can see, one of those skywires and I might not need anything else. Here are the advantages: it's a loop, so there's little static buildup from the wind, and less receive noise. It has NVIS characteristics on 80/75 meters, which is good for working locals in the daytime. On higher frequencies, the takeoff angle gets lower and it can be a great performer on 20 meters and up.

Joshua tree in the desert. N7JY and I are currently assisting another ham friend in planning for an HF antenna at his remote hamshack in the Mojave Desert, 6 miles from the boundary of Edwards AFB. We are thinking of putting up a full sized skywire for 160m! He's got most of 10 acres with nothing on it but sagebrush, and only one joshua tree, which isn't even in the way. Think about that! One antenna for use on all nine HF bands (160, 80/75, 40, 30, 20, 17, 15, 12, and 10 meters). (The big problem is what to use for the supports. Surplus telephone poles?) More to come on this if it pans out.

A Holiday Weekend with the Spider Antenna

On Labor Day weekend in September 1987, John N7JY (then-WB6SAN) and I (then-WB6WKB) went to the mountains in San Diego County to visit some friends who had a place at Lake Henshaw. Jerry, KB6KSW, had a Spider HF mobile antenna which we mounted on his truck parked next to the house (which was in a mobile home park). We used my IC-735, my AEA PK-232 multimode TNC, and my Osborne Vixen computer. We worked quite a few stations that weekend, with voice and data modes on 10 meters and 2 meters, and CW on some of the lower bands.

The Spider has several resonators that stick out in different directions. We had to adjust the tuning sleeves a little bit for the various bands, but once that was done it was ready to go! That's one impressive compact antenna and I think it's worth considering if you plan to go HF mobile.

During that trip, we took Jerry's own HF rig (I think he had a Kenwood TS-440 at the time) up to the lodge at the top of nearby Palomar Mountain and used that radio with the Spider up there at night on 10 meters. We talked to stations all over San Diego County from up there. That was one fun and memorable weekend.

HELP CLUB PROGRAMS

***.PLEASE I want your
ideas.***

***I'd love to direct or find a
program that YOU wanted.***

SPEAK UP !!!!!

***Until then here are a few ideas
I have for the next few
months:***

Propagation and Sunspots

SWR (with a real practical demo
that we can understand)

Cheap Yagis (Easy, fun,
Cheep AND blow away some
commercial ones) N8CL ????

Radio Checkup (bring in your
FM gear for testing on some
professional equipment)

Your Idea (Patiently waiting)

OCARC Weekly 2 Meter Net

The OCARC 2 Meter Net meets
every Tuesday evening at 9:00 PM
on the WA2DQL repeater.

Freq = 145.27 KHz -600
PL = 141.3 Hz

This is a very informal net and ALL
stations are welcome.

Our monthly Simplex night is the
Monday FOLLOWING our normal
club meeting.

It is also at 9:00 PM and is con-
ducted on 145.27 Simplex.

The schedule of net Control sta-
tions for the next month is:

Jan	12	KA2BCE
Jan	19	WA2TMC
Jan	26	KA2BCF
Feb	2	KC2JKU
Feb	9	KA2BCE
Feb	16	WA2TMC

NET CONTROL STATIONS

As you can see the Net control stations are
the same four stations. I am a new comer
to the group. The others have been an-
chors for years. Marion is a great net coor-
dinator and we should all be thankful to her
for keeping the net going for so long.

How about others? I'm sure Marion would
love to have a few "fresh faces" to run the
net and get comfortable handling a group
of check-ins. **GET INVOLVED!!** There are
lots of club activities that could use YOUR
support.