

Bacon Bits

Flying Pigs QRP Club International, W8PIG
 1900 Pittsfield St, Kettering, Ohio 45420

E-mail: w8pig@yahoo.com Web Page: <http://www.fpqrp.com>

FPQRP [membership](#) is open to all licensed QRP operators who reside within 12,000 nautical miles of Cincinnati, Ohio.

CONTACTS:

Diz, W8DIZ w8diz@cinci.rr.com
 Rick, WB6JBM ripowell@mpna.com
 Dan, N8IE n8ie@who.rr.com
 Brian, KB9BVN kb9bvn@arrl.net

NETS:

DAY	TIME	FREQ	NCI
Sun	0100Z	7.137	KC8NYW
Mon	0100Z	7.044	WB8ICN
Thurs	0100Z	7.044	KE1LA

CLUB FREQS.

1,814 kHz	3,564 kHz
7,044 kHz	10,110 kHz
14,062 kHz	18,100 kHz
21,064 kHz	24,910 kHz
28,064 kHz	

(All days/times listed are UTC)

ALL FPqrp frequencies are UP 4 kHz
 from the standard qrp frequencies
 except for 20 meters.

W8WGR – Featured Piggie of the Month FP #-12



Gary Hamm of Germantown Ohio – Looks better than my shack!

In this issue:

Ramblings: By Brian, KB9BVN
 Park Op's ala Pig Style – KD5KXF
 Multiband Verticals – KC8AON
 Logger 32 Software Review – WB0WAO
 Swampland Verticals – AF4PS
 WAP Standings
 April QRP Contests – N2CQ
 Info about the Flying Pigs:

Page 2
 Page 2
 Page 2
 Page 3
 Page 4
 Page 7
 Page 7
 Page 8

Ramblings

This month we're running way behind. The April BaconBits had a shortage of things to report until just recently. I suppose everyone is getting ready for another fantastic Four Days in May and the Dayton Hamvention. I know I need it badly. As usual, the Bacon Bits needs YOUR input, so keep those stories and pictures coming! Thanks to many of you, I think we have the "Flying Pigs Vertical Antenna Issue"!

DE KB9BVN – Brian Murrey

Park Op's ala Pig Style – KD5KXF

One of my favorite ways to operate is out at the park... no complaints from the family that I am hiding in the shack and it is a pure and simple joy. A quick grab of my "go bag" and it is off to the local pizza joint for a couple of pizzas, we sit down at the park and eat a late Saturday lunch. The kids barely finish a slice before they are off and running to throw rocks in the pond and pester the ducks. I fire the ez-hang up into the highest branch of the tallest tree next to the pavilion and raise my 20 meter dipole. Within five minutes I have everything connected to the BLT tuner and SST 20 and am tuning up. Twist the knobs and tune til the LED goes as dim as I can get it and switch off the SWR LED. Band sounds pretty good and I tail end a QSO and settle back with my TENE key and have a nice chat with Craig AE7I in NV who gives me a 439. We have a nice chat while I watch the ducks doing carrier style landings and keep an eye out for my kids. My wife is on the bench nearby reading and enjoying some peace and quiet. I wrap up with Craig and throw out a quick CQ QRP to see what I can dredge up. K9EYT/4 comes back immediately and I have a nice QSO with Ray who gives me a 559 from Tampa, FL. He is squeezing in some quality time while on a trip and is having his first CW QSO with his Icom 74S while in Florida. Leaned back against the stone work of the pavilion, I watch the sun begin to set over the small pond and see the ducks fly out in formation. The kids are starting to fade and come back for some more soda pop and all is well with the world as I chat with Ray. We sign and wish each other 73's and it is dark. Another beautiful dusk operating session has come and gone. I pack up the rig and put the antenna up in less than 5 minutes and we are ready to round up the kids and go home. Everyone seems content... the kids are winded, my wife had some peace and quiet and I got to do some operating. Get out of your shacks and go throw some wire in a tree, hook up your favorite portable mojo box and kick back, it is spring again. And if you hear a faint call from KD5KXF, you never know... I may just be barefoot in the grass myself with key in hand and a silly smile plastered on my face. 72 es OO's de KD5KXF .

Multiband Verticals – Build One! – KC8AON

It seems that today, most hams have very little space for full size dipoles for anymore than the highest HF bands. Most hams seem to be able to put up maybe one or two dipoles for the higher HF bands or they either opt for something like the famous G5RV and a tuner. Although the G5RV and a tuner

will do a great job on the low bands, as will the dipoles, they just don't do that great on DX. The 1/2 wave dipole and the G5RV are a decent ground wave antenna, and will work some DX, but they leave a lot to be desired. Most of the time, hams are simply not able to get their wire antennas high enough to work properly. A half wave dipole needs to be at least 1/4 wavelength above ground to get the most out of it, and that translates into a whopping 65 feet at 80 meters !

When you are talking about an antenna that is 130 feet long, its almost impossible to fit the darn thing on most city lots. Ok, then what do I do? The answer is very simple, use a multi band vertical! Yes, I know, most commercially made multi band verticals are very expensive. Some of the models that I have seen are comparable in price to a tri band beam, at least with the vertical you don't need to buy a rotator! But why not just build your vertical? Its really not as hard as it sounds.

I built one using an old 5/8 wave 11 meter antenna that a friend gave me for free! Poor guy will learn that hams have more fun someday! Anyway, this 11 meter antenna had an SWR problem so he took it down and bought a new one, so his loss was my gain. This particular 11 meter model was nothing more than a 22' telescopic aluminum radiator, with a matching coil in its base. To start with, I took the coil apart to see what might be wrong. What I found was simply a bad solder joint in a very cheaply made coil! The rest of the antenna seemed to be made very well, so I took the 11 meter coil out, and this isolated the radiator from ground. I then started looking around in my junk collection and found a coil that I had been saving. This coil was about 4.5 inches long, about 2 inches in diameter on a fluted ceramic coil form and wound with 14 gauge tinned copper wire. I added this coil to the 22 foot radiator, attaching one end to the bottom of the antenna, and the other end to the SO-239 connector at the bottom of the mounting bracket.

Then, wondering where the thing might resonate , I got my rusty MFJ-207 SWR analyzer, and my Radio Shack hand held frequency counter. Everyone that plays with antennas should have instruments like these, MFJ even make models that cover HF thru VHF, and have the frequency counter and an impedance meter all built into one neat little box, making antenna measurements a snap.

Anyway, back to the project. I connected the SWR analyzer to the antenna, and swept thru the HF spectrum to find a dip in the SWR, what I found was that I had a 1:1 match at slightly below the 80 meter band. Being resonant below the band told me that it was just a tad bit too long, so I moved the bottom coil tap up a couple of turns, and it fell right on in the middle of the 80 meter CW portion of the band.

Being only about 1/3 of a quarter wave on 80 meters, its definitely not a band buster, but it will fit almost anywhere! The only bad thing about it is that you need to have a good ground system for it to work right.

Wire radials seem to work best here and the more that you add the better. They really need to be at least 1/4 wave long, but in

most cases this isn't practical, so guy out as many as can be had and as long as you can make them! And, I might add, they don't have to run in a straight line either! Now, with that band out of the way, I was looking at all that unused coil space. I grabbed a short piece of wire, installed an alligator clip to one end and fastened the other end to the bottom tap on the coil. Then I started trying different tap points up and down the coil to see where I could make it resonate at. I found by changing the coil taps, I could resonate the antenna on 40, 30, 20, 17 and 15 meters as well. On these bands, I could cover the whole band and with just one setting. Don't be afraid to experiment around with the coil and antenna dimensions, the ones that I used here are what I happened to have on hand so use what you have and see what you can come up with. You may even want to try a remote switching arrangement! The possibilities are endless. I would like to try a roller inductor and motor combo as a remote tuner, so you see, just try what you have and see if it will work for you. You can even buy (heaven forbid) aluminum tubing at hardware stores, it comes in sizes that will fit one inside the other making it easy to make just about any length that you want.

You can wind your own coils, using the ground wire from ordinary house wire and using PVC pipe as the form. I would start with a vertical portion that is about 18 – 20 feet in length, add a capacity hat made from some scrap solid wire about 12 inches long (this goes on top like spokes of a wheel).

Figure out a way to mount it and isolate it from ground and connect your coil to the bottom. You can mount the thing at ground level or you can put it up on a pole like I did and be sure and put at least 4 radials that are cut $\frac{1}{4}$ wave for the lowest band of operation under it. If you don't have the room for $\frac{1}{4}$ wave radials, just make them as long as you can. It won't radiate as efficiently, but it will radiate! A compromise antenna, is better than no antenna anytime! I've even thought of putting one on top of my tower without the coil and feeding it with 450 ohm ladder line and the a trans match for multi band operation for 20 meters and up. If you do this, make it about 20 feet long with 2 or 3 20 foot wire radials on the ground side for a counterpoise. A friend of mine had one like this up for some time with great success on DX! He only took it down to put up a tri band beam, but said he missed the vertical because he could be working DX with it while the other guys turned their beams!

Don't buy a commercial vertical, build your own and use the extra cash to buy more QRP rigs! And, you can hang Old Glory on it if you live in one of those antenna restricted (communist) neighborhoods, and no one has to know it's an antenna!

72/73

Rick McKee, KC8AON

Logger32 – A Review by WB0WAO

I have been using the Logger16 program for quite some time now and have really found it very useful. Not only is it free (free is very good) but it is pretty easy to use and has a lot of features that make operating a whole lot easier. For a couple of years there has been talk of a “new and improved” version of

Logger, that would blow the old one away. Well, after a long wait, it is finally here, albeit in a “Beta+” version.

Logger32 is freeware also, but it has the features of any of the other logging program that will set you back a fair amount of bucks. It can be downloaded from www.qsl.net/kc4elo but be prepared to wait - it is over 10MB in size! I have a standard dial up connection and it took nearly 45 minutes to download! But it was well worth it!!!

I could write pages and pages of stuff that it can do, but I will just list the highlights. But remember, this is a Beta, so there may be more features/functions that have not been enabled yet! But as it is, it is a pretty darn good program.

1. Logging - Duh! Of course it is a logging program! Some of the things that it does as you log is check a CD-ROM callbook or if you are online, it will check QRZ.com and give you all the info on that call! It will give you the the DXCC name of the country, the status (new country, needed on that band, not confirmed, etc.), sunrise/sunset times, LP/SP and SP distance, and local date/time. It will also tell you if you have QSOed before and when you are entering the call, it uses a “supercheck partial” type of drop down box, where you can click on a call and it will finish filling it in for you. If you have the cluster window open, you can click on a call and all of the info from the spot will be transferred to the QSO entry box. Once the entry is logged into the program, you can bring up the Logbook Page Window. This will show you all of your contacts. Oh by the way, there are a total of 47 different fields that you can display on your logbook page! This program utilizes ALL of the fields in the ADIF format! And there are 7 additional user defined entry fields as well. Oh, did I mention that it is LOTW ready (or at least it will be soon)?

2. Award Tracking - It will track IOTA, WPX, WAZ, DXCC, WAS, Counties Award, and Grid Squares (although it only lists HF bands??). These are all the biggies, with the exception of the Worked All Pigs award. I would have liked to see a way to have a user defined award tracking function, but you can't have everything!

3. Sound Card/Digital Modes - Supposedly it will do all of the major digi modes, but since I don't play with them, I can't give you a lot of information about them. From what I have read on the email group that deals with this program, it is VERY impressive what it can do. I can tell that it does do PSK and RTTY. There may be some variations of these modes that it can do as well, but I don't run any of them. If you are familiar with a program called Zakanaka, this is what is embedded in Logger32 (same guy writes it).

4. Oh, it does satellite tracking as well! And has a grayline display, and what looks like a spot map as well (doesn't seem to be enabled yet tho).

5. The program will control your rig, rotor and antenna selection too! I also don't use any of these features, but they are said to work FB! Imagine, clicking on a spot on the cluster window and your rig goes to that frequency, the correct antenna

is selected and the rotor turns the antenna to the proper direction!

I am sure that there are a whole lot of other things that it can do, but I just haven't had the time to discover them all and there are some things that probably are not enabled as of yet. Overall, I give it 9 out of 10. If you are looking for a first rate logging program, check this one out.

73 de Dennis WB0WAO

Swampland Verticals – AF4PS

(Extreme gratitude is expressed to: NF0R, KJ7MZ, G6XN, KA5DVS, W2FMI, KI6DS, W2XN, NN1F, K4KSR, K3ESE, WB8ICN and W8DIZ.)

This will be a two-part article on my experiments with stealth and portable vertical antennas. This first part will address three temporary experiments (really two and a modification), which may (or may not) offer some useful information for those interested in portable operation. You won't find much science here except in the references to good sources. The second part will be my attempt to implement and document Diz's, FP-1, W8DIZ idea for a "permanent" all band vertical at my particular location with all of its limitations (and alligators), which is evolving into quite a project! This link will give a hint regarding my other idea:

<http://www.angelfire.com/md/k3ky/page38.html>

(Curtains for the swamp!)

“In the mean time...”

Many of you reading this already know, but for background I'll say that I recently moved from a wonderful location where I enjoyed extraordinary performance from stealth antennas. The 70' long attic running north/south housed the I.A.D. (Infamous Attic Dipole)¹ which evolved into a twinlead fed multiband G5RV variant. That antenna genuinely spoiled me, performing way beyond expectations for an indoor antenna. Further, multiple huge Live Oak trees surrounded my house and eventually supported a 280'+ stealth loop which seemed to rake in DX contacts despite the fact that I was the operator! These two antennas worked well in concert, swapping back and forth with varying conditions and propagation. I was a happy piggie. Then, prompted by job related issues, I moved, again into a deed restricted development selected by SWMBO (she who must be obeyed). Sigh.

The Negatives

The new location has a very active CEC (Covenant Enforcement Committee), whose secretary happens to live next door to me. Sigh. The new house is two story, with no attic at all, and houses are very close on each side (NE and SW). I have tried a loaded flagpole antenna in the front, various wires on my roof, an under-the-eave dipole, loading up the rain gutters, and even a “droopy loop”² idea around the circumference of my roof, all with unsatisfactory results. To put this in perspective, I chatted with Dennis, KA8TQR in Parma,

OH, for about 15 minutes. Dennis was using a Rock Mite and a dipole with my K2 at 3 watts and a 40m Hamstick stuck out the window! Most of us have experienced those wonderful odd contacts. Weird things do happen, but one can't depend on that kind of propagation consistently. The house's backside and backyard remain my only potential options for antennas. Unfortunately, the back not only faces southeast (you think YOU notice the 40m SSB on 7.044 MHz?), but also slopes downward away from the two story house toward the swamp making takeoff angles toward any direction but southeast an issue.

I planted some trees around the circumference of my little, cramped lot (future loop!), but they are not tall, 6'-15' at best. All the good trees, 40'+ in height, are across the swamp/canal, by the lake, and are not on my property. While there are some small trees along the swamp (less than 15' tall) various feedlines have been cut by grounds and maintenance crews who come along sporadically. The one good potential tree (a 30' pine) is 6" (INCHES!) across the property line on my neighbor's lot. (Disclaimer: Yes, it's Madam Secretary's side, and Jo, FP-325, K5HOY says I shouldn't even consider using that tree, citing various applicable sins. Sigh, Jo is right of course, but she is such a GIRL! Diz, by the way, didn't even ask about the property line - grin.) The covenant rules prohibit boats in the swamp, canal and lake, which brings up one other issue that could be seen as negative relative to any work done by the water: gators. (This 6' one's a mere baby.)



The Positives

My “shack” is in the middle room of the second floor (the office) and I have a painted PVC feedline pass-through that is almost invisible down to the ground. It contains both RG58 coax and 300Ω twinlead, thus the issue of getting the feedline down and out of sight is resolved. The soil, while somewhat sandy (it IS Florida), stays pretty damp, and the slope down to the water lets the feedline PVC drain, plus, the dampness helps with ground plane issues. (This moisture may have also contributed to my positive experience at old location which was 2/3 surrounded by lake.) The afore mentioned row of scrub trees and small pines along the edge of the swamp, which

currently supports the short side of my broken Windom, are there and useable such as they are. Plus, the Homeowner's Association no longer sends the guys with weed eaters along the edge of the swamp, so my feedlines are somewhat safer. Last but not least, SWMBO doesn't care what I do back there antennawise as long as she doesn't have to come and look at it and pretend she is impressed with my work.

Primarily because of the lack of natural antenna supports, I decided to experiment with verticals. This was both encouraged and daunted by reading some of the work of antenna greats like Moxon, G6XN, Ceibik, W4RNL and Maxwell, W2DU – (whew!). Seminary did very little to prepare me for all this theory stuff, but of particular interest was Moxon's conclusion that verticals properly erected with their "feet on the ground" work nearly as well as when raised in the air.³

Experiment #1 – The St. Louis Vertical, original vers

The original article⁴ and instructions for NF0R Dave Gauding's design are found at: <http://www.fix.net/~jparker/slv.html> or <http://www.norcalqrp.com/projects/stluisvert/slv.html>.

There are several "upgrades" offered for this antenna, some commercial and others homebrew. I wanted to keep it simple and stealth, maintaining the advantage of quick setup and take-down.

This version uses 300Ω twinlead wrapped tightly around the base of the SD-20 fishing pole as the "coil". Dave's idea was to add 46' of coil wire to extend the 20' radiator to an approximate 1/2 wave on 40m, full wave on 20m, etc. My heavy duty twinlead would not fit that many turns on the base section of the pole. No worry, because several builders reported having to shorten the coil wire to bring the antenna to resonance above 7 MHz. (This is covered in an appendix to Dave's article on the NorCal website.) According to my MFJ 259b analyzer, my 100 turns resonated at 7.023 MHz with the addition of four approximate 25' radials. I don't worry so much about resonance on 40m because I like to operate multiband and use a tuner. Subsequent homebrew versions of the antenna use shorter coil of bigger diameter with wire formed around PVC or cardboard. One may then use an alligator clip to tap the coil for different bands.

At "home" I have been using 8 radials of random different length (between 15' and 25') fanning out relatively equidistant from the base. The radials attach to one side of the 300Ω twinlead via alligator clips. That close to the swamp, I HAD to use alligator clips.

It's fed with 300Ω twinlead which runs from the base of the antenna up to the back of the house. There it finds the painted PVC pipe up to and through the second floor window of the shack and the internal ATU of the K2 or the Emtech ZM-2 when I am on the MP#4 (old ugly version) or various other QRP mono-banders.

On the trail is where it really shines. I use it in the ARS Spartan Sprints, and "To the Field" events like FYBO and BYBO. The

SLV's SD-20 fiberglass pole collapses down to about 4' and I use it as a walking stick. The feedline, radials and guys all fit in a small zip-lock bag which fits in the same compartment of my backpack as the rig (usually the Norcal 20 or the Small Wonder Labs 40, sometimes the K2). The vertical requires no launching wire into trees – something that became somewhat important to me when I ripped the rotator cuff in my throwing shoulder! Further, launchers of various sorts are added weight and hassle. No external support is required, with the possible exception of guys in very windy conditions.

I found my implementation of this renowned, simple, portable to work well, amazingly well, in fact, especially as a backpacking/trail antenna. It is easy to build and really works well multiband if you use a twinline feed and tuner. But down in the valley at home I was not getting the performance of NF0R! Each time I hear Dave on the air I call him to give him a report from FL and to thank him for the antenna idea. Earlier last year I had Dave's signal (from MO) 579 when he used the St. Louis Express, and 589 or better on his St. Louis Vertical, which I believe is mounted on his roof. I need to ask him about his radial system, because comparatively, I'm not getting that kind of signal reports.

Remember, mine is mounted downhill, with only 8 (sometimes 4 if I'm in a hurry) radials, and the low take-off angle is blocked to the west by houses. I can work EU fine, but this set-up at home was not helpful in the stateside foxhunts AT ALL. On the trail, as mentioned above, it works as good as any of my random wire or hasty dipole efforts.

I alluded to the added benefit that the SLV collapses down into a very portable 4' section which I use as a walking stick when backpacking. But even a walking stick or the addition of a shoulder sling can be cumbersome when the trail involves climbs. Along came experiment number two.

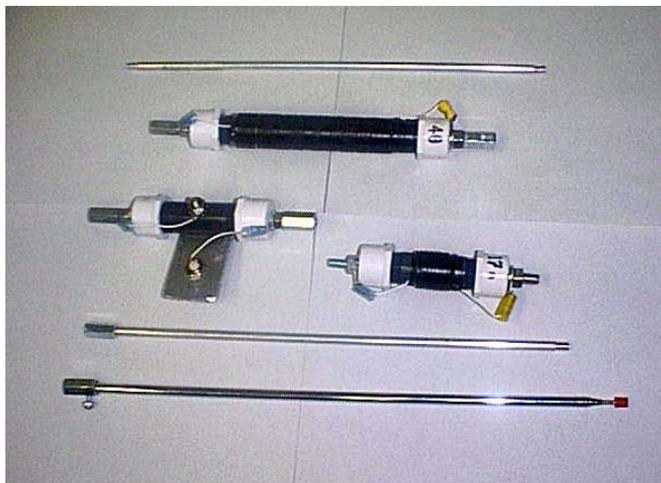


Here is a pic looking out to my backyard with the infamous swamp/lake in the background. (Notice those wonderful inaccessible trees just across the water, that will one-day support my stealth loop! This will happen when those lazy

“pigs” Paul FP-124 K4FB, Brian FP-57 KB9BVN, Mikey FP-68 WB8ICN, and Aron FP-122 NN1F get off their duffs and visit me like Diz did!) At night this antenna is very hard to see.

Experiment #2 – The PAC-12, AF4PS Semi-dog-leg Vers

James Bennett KA5DVS, designed the PAC-12 and you can find a copy of the original article⁵ online at: <http://www.njqrp.org/pac-12/>. “PAC” stands for Portable Antenna Concept, and the “12” refers to the disassembled length. I was drawn to the PAC-12 for two reasons: 1) PORTABILITY (it really does break down into 12” sections) and, 2) PERFORMANCE, it won the HF-PACK6 portable antenna shootout.



Above, you will see the components of the PAC-12, 2 threaded 12” rods, couplers, feed point (BNC connector on aluminum flat bar to which radials are attached), 72” telescoping whip with coupler, and two coils, 40m and 17m. In the swamp I use a 24” base section to push down into the sand. The second picture captures the 40m coil in action in my backyard with the swamp in the background.

The PAC-12 is a bit more complicated to build than the St. Louis Vertical, you will need access to a tap and die set. There are three tricky steps: If you are not experienced with these tools, you will end up with crooked threads like my semi-dog-leg version! (Mikey FP-68, WB8ICN subsequently told me about drilling a hole in a 2x4 to make a guide as one threads. I always get good advice like this AFTER I finish a project! Some tap and die kits come with a fancy clamp on guide also. Mine was found at a flea market, with no fancy guide included.) Drilling a small hole, tapping threads in the 5/16 hardened coupler and drilling out a portion of the original threads to receive and secure the telescoping whip base was not easy for me. If I didn’t have access to a drill press, I would have skipped that step, and forced the whip base into the coupler’s threads (not recommended). Also, a drill press makes drilling the hole in the PVC caps much easier, especially if you get the caps at Home Depot where I was told they will no longer be stocking the brand with a flat top. The new ones are beveled.

I tried using a piece of copperclad for the feedpoint in my first effort. It worked great, but the copperclad seemed to oxidize, tarnish and gunk up pretty fast when exposed to inevitable moisture of my backyard and trail excursions. My second version uses the called for piece of aluminum flat bar, and I added connectors for my twinlead, as well as a BNC connector for coax.

The Next Level – Adding Permanence and Performance

Both of these antenna designs are wonderful as portable trail antennas. They also work well from my backyard as my “main” antennas. But I wanted to optimize their performance and make a more permanent setup for home, while maintaining my stealth profile.

I found an enlightening old article by Jerry Sevick, W2FMI from QST July 1971, regarding radials.⁷ (I read this while procrastinating finishing the back deck and considering if I might avoid re-sodding the back lawn down to the swamp.) Sevick experimented with a 20m vertical to gauge the effect of adding radials. He concluded that significant improvement was experienced by adding up to 40 radials, with lessened, but still improvement gained by adding even more. He used 8 bundles of 5 wires attached to the base of the vertical, then fanned each bundle out symmetrically totaling 40. I had used random length radials, and radials cut for different bands before, but never in this number. Some of you will recall Doug Hendricks, FP-23, KI6DS from NorCal QRP Club and others have done this “bundle approach” using multi-stranded “computer ribbon” for their portable antennas. This bundling makes travel, set-up and take down MUCH faster and easier, with some trade-off of performance. However for a permanent installation, Sevick’s experiments demonstrated that more is better when it comes to radials, especially up to 40 of them. Further, many sources indicate that the length of buried or on ground radials is not as critical as with elevated radials. But Sevick demonstrated the contrary, longer radials (25’) seemed to perform better than short ones, even on the ground. Also, he suggested if they are to be buried, bury them shallow (less than a few feet) as

opposed to deep (over 6 feet), eventually recommending "slightly below the surface is the best way."

It occurred to me that I could lay down this huge (to me) array of 40 radials, then lay the new sod on top of them, and they would be buried an effective 4-6 inches, (unseen and out of lawnmower range) permanently deployed! I could possibly cut each of the five wires in each bundle at random length or ¼ wave for 5 different bands and see which worked better. I could use a recessed metal pipe as a base support for a vertical like the SLV or PAC-12. The radiator part could be removed when not in use. In addition, I only have to worry about the guy lines as opposed to stringing out a limited number of radials each time. WIGGII! (Ok, this work is still in progress, so the comparative results will be shared in part two.)



I've begun laying some of the radials which fan out partially under the not-so-finished deck. After the deck is done, I will start the preparation for the new sod, and deploy the rest of my wire. Boy, do I hate shoveling sand!

Part two will address an even more permanent solution to my antenna situation. Diz, FP-1, W8DIZ recently visited me because he was tired of hearing me whine about my antennas. He gave me an idea of a multi-band vertical permanently installed utilizing a (hypothetical) pine tree. I will also illustrate an alternative idea using the smaller trees along the edge of the swamp. In the mean time, I am working to maximize the performance of what I have. oo

1. Steinmeyer, Mac – AF4PS, "The Infamous Attic Dipole", Bacon Bits, newsletter of the Flying Pigs QRP International, January 2001, p.5.
2. Newton, Patrick - KJ7MZ, "The Droopy Loop", QST, ARRL, July 1996, p57.
3. Moxon, L.A. – G6XN, "HF Antennas for All Locations" Radio Society of Great Britain, 1986, p154 (see also p134ff).
4. Gauding, Dave – NF0R, "St. Louis Vertical", Peanut Whistle, Journal of the St. Louis QRP Society, August 1996.

5. Bennett, James – KA5DVS, "Build the PAC-12 Antenna", Homebrewer, Journal of the New Jersey QRP Club, Issue 8

6. The details of the HFpack antenna shoot-out are included in the Bennett, PAC-12 article as an appendix, and can also be found online here: <http://www.hfpack.com/>

7. Sevick, Jerry – W2FMI, "The Ground-Image Vertical Antenna", QST, ARRL, July 1971, pp 16-20.

WAP Contest Update

Currently we have 39 Flying Pigs that have posted their ongoing results to the website. (<http://www.fpqr.com>)

As of 04/20/2003

Rank, QSO #, Callsign

1 69 K3ESE	2 56 K4FB
3 47 KG4FSN	4 46 AF4PS
5 46 W8DIZ	6 32 AC5JH
7 31 KB9BVN	8 27 AJ4AY
9 24 KC8AON	10 22 WB8ABE
11 20 K9DI	12 19 NN1F
13 18 WN4M	14 16 K8FP
15 15 W9FCC	16 14 N8IE
17 13 KI8JM	18 13 WB0WAO
19 12 KC4URI	20 12 N0JRN
21 11 N7MFB	22 9 KB5ELV
23 9 VE3VG	24 8 W0CH
25 8 W0JRM	26 6 VE3CRM
27 6 VE3FAL	28 6 WU9F
29 5 K8PZ	30 5 KJ0C
31 4 K6MMC	32 4 KG4LDY
33 4 W7ILW	34 4 WR5O
35 3 AG4NY	36 3 W9HL
37 3 WB6JBM	38 1 K8ZT
39 1 WV9N	

Looks like Lloyd is going to be tough competition!!

APRIL QRP Contests – TNX to Ken N2CQ

Low Power Spring Sprint (CW) ... QRP Category
Apr 21 - 1400z to 2000z

Rules: <http://www.arrl.org/contests/months/apr.html>

Helvetia Contest (CW/SSB) (Swiss) ...QRP Category
Apr 26 - 1300z to Apr 27 - 1300z

Rules: http://www.uska.ch/html/en/index_e.htm

QRP To The Field (CW) ...QRP Contest!!

Apr 26 - 1500z - 2400z (Pick any 6 hours)

Rules: <http://www.norcalqrp.com/>

Florida QSO Party (CW/Phone) ... QRP Category

Apr 26 - 1600z to Apr 27 - 0159z and

Apr 27 - 1200z to 2159z

Rules: <http://www.qsl.net/fqp/>

Nebraska QSO Party (CW/SSB) ... QRP Category

Apr 26 - 1700z to Apr 27 - 1700z

Rules: <http://www.qsl.net/hdxa/neqso/index.htm>

Thanks to WA7BNM, SM3CER, N0AX-(ARRL) and others for assistance in compiling this calendar.

Anyone may use this "QRP Contest Calendar" for your website, newsletter, e-mail list or other media as you choose.

72 de

Ken Newman - N2CQ

N2CQ@ARRL.NET

<http://www.njqrp.org/data/contesting.html>

<http://www.n3epa.org/Pages/Contest/contest.htm>

<http://www.qsl.net/cqrp/contests.html>

About the Flying Pigs QRP Club International

OUR MISSION:

- 1: Have Fun.
- 2: No rules.
- 3: Have a group of Friendly Hams who enjoy Amateur Radio, and sharing their skills with their fellow Hams.

CLUB EMAIL POLICY:

These are not rules, just common sense.

Club email is not moderated, as we are not a stuffy group. You can send off topic messages about most subjects, but please keep it clean and in good taste. We do like good-natured ribbing and joking with each other, but we will not tolerate flaming other members or spamming the group.

We will remove offenders who abuse our open policy.

CLUB WEB PAGE:

The club web page is our forum for sharing projects, and information about us. You are encouraged to submit your ideas and projects to be added to the web page.

PROBLEM REPORTING:

If you are having problems with email, the web page, or a fellow club member, please report this to either:

Diz, W8DIZ at w8diz@cinci.rr.com

Rick, WB6JBM at ripowell@mpna.com

Dan, N8IE at n8ie@who.rr.com

We welcome all to join the Flying Pigs QRP Club, and we hope you have fun! Ω