

# Bacon Bits

Flying Pigs QRP Club International, W8PIG  
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FPQRP [membership](#) is open to all licensed QRP operators who reside within 12,000 nautical miles of Cincinnati, Ohio.

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### NETS:

DAY	TIME	FREQ	NCI
Sun	0100Z	7.137	KC8NYW
Mon	0200Z	7.047	WV9N
Thurs	0200Z	7.047	KE1LA

(All days/times listed are UTC)

### 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 FPgrp frequencies are UP 4 kHz from the standard qrp frequencies except for 20 meters.

### WB9LPU's PAC-12 Antenna – Read his article!



all40.jpg

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## Ramblings

What? It's DECEMBER?? Already?? Yup.

It's time to get practicing that old straight key for Straight Key Night on New Year's Eve. If you have never participated in SKN, you are really missing out on a fun filled time. I'll be out there with my HW-9 and the old J-38 trying to make some NYE QSO's. I hope to hear you on the air!

Check out Rich's very NICE PAC-12 antenna build!

DE KB9BVN – Brian Murrey

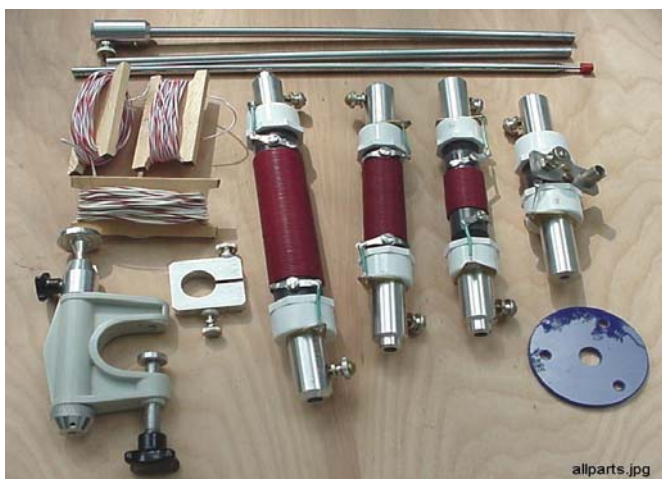
## PAC 12 Vertical Antenna – WB9LPU

This is an adaptation of the PAC-12 vertical antenna designed by James Bennett, KA5DVS, as published in the QRP Homebrewer #8 (April 2002). I followed the basic plans for the overall construction but made a few changes in the details. These were:

1. Use of 5/16" aluminum rod instead of quarter-inch for the lower two sections.
2. Use of couplings made of three-quarter inch aluminum rod stock, with thumbscrew locking, instead of threaded rods and couplers. (I have trouble making accurate threads on rods.)
3. Terminated the coil windings with screws and solder lugs so that it would be easier to remove turns during initial tuneup.
4. Added a provision for the attachment of guy ropes.
5. Added a bracket to the base unit for attaching a SWR bridge.

Here are some pictures of various aspects of the construction, and the results of some preliminary measurements of the antenna's characteristics.

The first picture on the page shows all of the antenna parts prior to setting it up. Each radial wire is wound on a separate wooden spool to avoid tangling. The rectangular object at the lower right is a clamp for attaching a SWR bridge to the base of the antenna.



The next picture shows all of the antenna parts packed in a small toolbox. It came from Sears Hardware and was described as an "underseat" toolbox for pickup trucks. It is big enough to hold the antenna rods, three loading coils, three 15-foot radial wires, a small camera tripod, a mounting clamp, and a small SWR bridge.

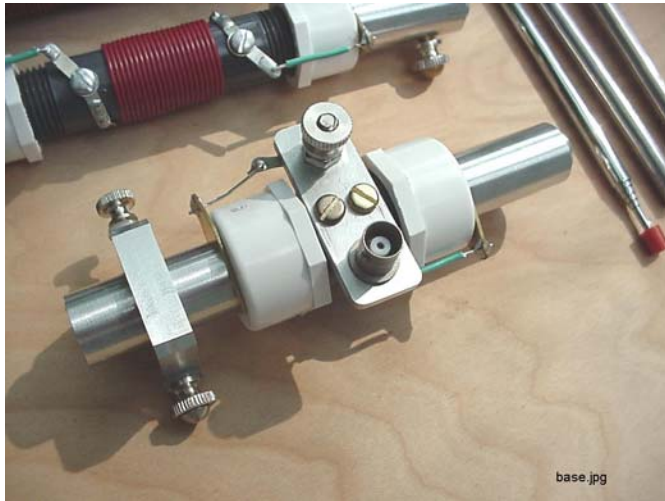


The next picture is of the three loading coils. They are for 40, 30, and 20 meters. The 40-meter coil uses a three-quarter inch riser, while the other two use half-inch tubing. The end-caps I found were not flat, so I turned a flat surface on the lathe. I terminated each end of the coil windings with a solder lug held by a screw threaded into a tapped hole in the vinyl riser in order to make removing turns easier.



A short wire link connected to coil to a small piece of brass sheet stock that was drilled to accept the mounting screw that went through the end-cap and into the metal couplers. The upper coupler of the 20-meter coil is shown with the whip antenna attached, and the blue plastic disk, which slips over the end of the coupler, is used to attach guy ropes to stabilize the antenna in windy conditions. The antenna rods are held in the couplers by brass thumbscrews whose ends were rounded off to prevent marring the rods.

The base of the antenna can be attached to a clamp or photo tripod, and a clamp is provided for attaching a small SWR bridge.



RF connection is via a BNC connector, and the radial wires are attached by the thumbscrew. The base, set up for use, is shown below.



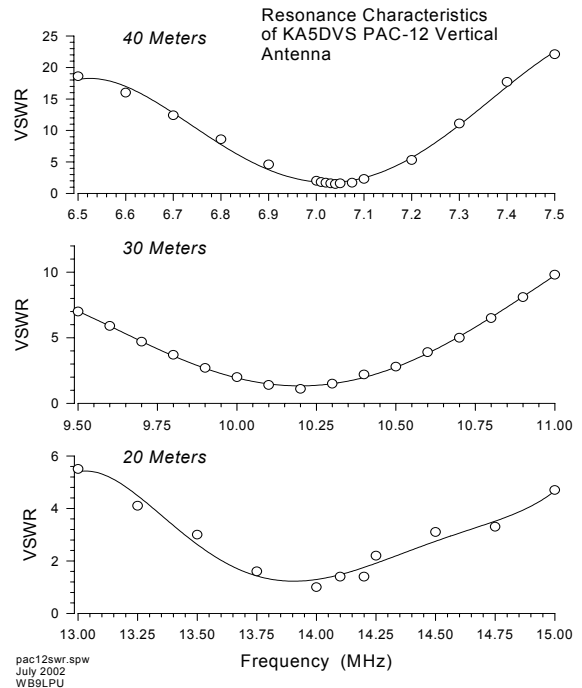
With the coils as presently wound and trimmed, the antenna can be brought to resonance on all three bands with a slight reduction in the full extension of the whip. On the next page is a "picnic table ham station" showing the antenna connected to a K1 transceiver. In the limited time that I have done on-the-air testing, my best distance on 40 meters is from central Indiana to South Carolina during daylight hours.

The antenna can be completely set up and tuned in five minutes or so. When time permits, I intend to make a slider-tuned loading coil to eliminate the coil change when going from band to band.

Building this antenna has been an enjoyable project, thanks in large part to the clear and detailed article by James Bennett, KA5DVS, in the QRP Homebrewer.

My thanks and congratulations to James and the editors of the Homebrewer. The full article may be found on their website, [www.njqrp.org](http://www.njqrp.org).

Below are some measurements of the antenna's performance, made with the Vectronics version of the MFJ 259B antenna analyzer. There were 3 radial wires, each 15 feet long, connected to the antenna base. The tuning is broad enough that the entire CW portions of the bands can be covered without retuning.



Richard Meiss, WB9LPU  
Speedway, Indiana  
July-Oct, 2002

**Pigs don't just fly...THEY SPRINT!**

Congratulations to Paul Womble (K4FB), FP # 124 won the Heavy Weight class of the Adventure Radio Society November Sprint. If you have never joined the fun on a ARS sprint, you are really missing out. They are the first Monday of each month.

For rules:  
[http://www.natworld.com/ars/pages/spartan\\_sprints/ss\\_rules.html](http://www.natworld.com/ars/pages/spartan_sprints/ss_rules.html)

## Flying Pigs at the Hamfest

In October 2002, the Flying Pigs were once again in full force at the Hoosier Hills Hamfest in Bedford Indiana. If you have heard of Bedford Limestone, now you know where it comes from.



The picture above here is just a shot of some of the homebrew and QRP items I brought for show and tell.



Rick Powell WB6JBM is working his SWL+ 40 or 20, trying to make the first QSO from the hamfest. Show and Tell Below.



Rich WB9LPU, Randy WV9N, Rick WB6JBM, Kent KB9VZS  
Brian KB9BVN, Diz W8DIZ, and Phil WB8ABE

## Mobile QTH – Chuck AA8VS

First I would describe what I was expecting to do, work HF in the car on my way to and from work. With two grandkids it is hard to find time in the evenings at home to play radio. This is my choice because I really enjoy baby-sitting the little ones. The next criteria that I drive lease cars and whatever method used to mount the equipment must not damage the car, simple huh? So here is what the mobile QTH looks like.



The rig I picked to use, because I had it already, was the SG 2020. This is a great little rig that works 160 to 10 meters LSB, USB, and CW. The next question was a tuner, with the entire hubbub about cell phones I am not about to tuning up an antenna while I drive. I always had exceptional luck with MFJ tuners no matter what I had; they always worked well [more on this later].

So the answer here was an auto tuner so I do what every other ham does and bought one of each tried them [don't think so].

I gathered up information on every tuner I could think of. I looked at the screwdriver type antennas and said can I put that on a car and meet the lease car criteria? Did not see a way to do

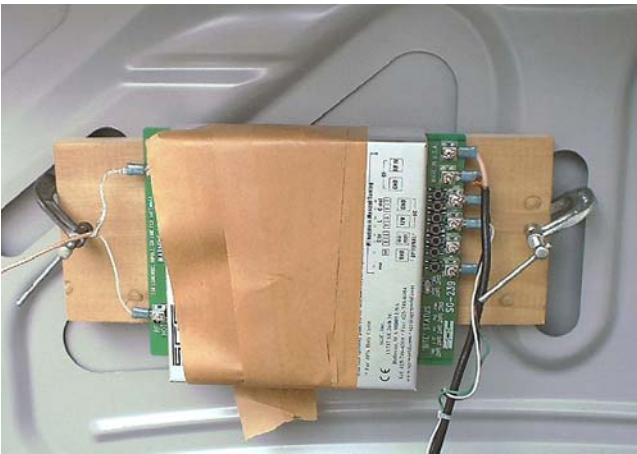
that and meet the grounding requirements. Most of the fellows I talked to with folks with this kind of antenna. Most of the problems I have heard about ended up being an improper ground.



So I chose four to look at in more detail and started putting down what they could and could not do in an Excel spreadsheet. The four I looked at were two SGC and LDG tuners. The initial question was do I want to be able to do 6 meters in the car using the same tuner? Decided not to do that at this time. So that brought it down to one SG and one LDG tuner.

The one thing I found about the LDG tuner was that the tuner would allow bands close to each other could be worked on a single ham stick. SGC stated because of the wide range of input matching impedance .2 to 5000 Z the 108-inch whip should work 40 to 10 meters from a single antenna.

I sent the same e-mail to LDG and asked if they could work with a 108-inch whip and they said their antenna did not have the wide characteristic and they could not recommend it to function in that manner to full expectation. A couple of months ago following up on this I did post the same question to QRP-L and a fellow in Canada that uses the LDG in this manner and has no complaints.



But I went with the SGC, next was getting the antenna tuner as close to antenna as possible and not damage the car. I

experimented with magnet and found one that supported the weight and checked with SGC, I wrote them a lot, and they stated a magnet in close proximity is no problem for the tuner. However, the magnet turned out badly - - - Never occurred to me you have to shut the trunk lid and latch it! The book [same weight as tuner] when placed where I wanted it hit the bottom of trunk when I closed the lid. Now to plan B!

I spent field day this year with a buddy and I posed this antenna mount question to him. He suggested I fasten the tuner to a board and clamp the board to the trunk lid and let me tell you it does not get any simpler than that.

The next thing I found out through both word of mouth, a book on mobile installations, and recommendation from SGC was get the tuner as close to the antenna feed-point as possible. This solution fit in exactly with the method of fastening the tuner to the trunk lid also.

This was not as critical for the LDG tuner. I still believe you need to get tuner as close to antenna as possible because you are just adjusting the additional load from coax. I did find during bench testing using the coax to antenna in attic, the SGC tuner got confused once in a while. But most fellows I talked to have the tuner in the car with the radio and seem to enjoy good success.

Next I set up the operating position for the rig and found out that I am not ready to use a keyer yet. I have used a bug on CW for the last couple of years. I am not going to use the bug in the car. I have to think too much with the Iambic keyer so far. I don't want that kind of distraction while driving just yet. So I went with a straight key and here is what the setup looks like.



The wire/ coax I fixed up has the coax and three additional wires going from the rig to the trunk. The coax is for the RF; two of the wires are for the 12VDC and ground. The third wire is for the TND light. You can put a 12VDC LED in line with TND output and 12 Volts and current limiting resistor. When rig has been tuned the TND supplies a ground and lets you know that tuner in trunk has done its job. I am not using this yet, because the S bar on rig shows me what is going on quite well.

So how is it going so far? Well here is a run down, I have looked long and hard at the 108" whip and found I can't put it in the trunk. I like to work 75 SSB 4:30 AM there are some great guys in a net that runs there and they do not mind lower power folks. Have not figured out where I would put the whip antenna for the drive home yet, but still thinking about it.

I have found the 75-meter ham stick lets me check into my CW net on 80, SSB on 75 and have worked some folks on 40, 30, 20, and 17. 20 and 17 loads OK, but I suspect the efficiency could be better I do not get 599s if you know what I mean. But the 80,75, and 40 is a good workable setup. Before I go on I would like to say that the type antenna you get can make a difference setup wise, in my opinion. I have had great luck with the type that have self locking arrangement on the stinger. Basically you set it up once and tighten the locking nuts down. When you disassemble the antenna to put away the adjustment stays put with this arrangement, see picture.

Next I have a 40 Meter Hamstick and it works 40, 30, 20, and 17 meter bands but the antenna [in a past life] has been damaged in a fall off vehicle while I was looking at mag-mount antenna setups. That is another story and I won't go into it at this time.

I have a 20-meter Hamstick and it tunes 40, 30, 20, and 17 and I have gotten decent reports on this one. In fact on the way to Indianapolis I checked into the [GM] Firebird net at 7.277.5, which runs 6 days a week at 13:00 EST time. Got good solid 58 and 59 from down south and east coast. The guys in close, had trouble hearing me and me them.

On twenty meters [drum roll please] I worked K5MFJ on the drive down on 20 meter CW [14:25 EST at 14.035]. For those that may not realize it, Martin [Mr. MFJ] who is a super CW OP and every bit a gentlemen. I mentioned I had chatted with him at the Huntsville swap the year before last [along with several hundred others] but he was not clear on that conversation.

My wife is not crazy about driving a car with a 7 foot antenna on the back of it and the 2 meter ¼ wave antenna on the roof. I think it is the 2-meter [HI HI] but I can't expect her to take it off. So when I mention the 9 foot one I just get such a look. The 9 foot one I still believe is a good choice, but need to work out how to put it away.

In conclusion I am having good luck with the setup and I have been able to use my drive time to play radio and not take away from grandkid time and the surface of the car is not damaged. I can have the system removed in about 45 minutes and no one will know it has been there. So thinking back when I made General I had a goal of working CW in the car. While not good at it yet I at least now have started and have time to practice.

Again thanks for the time and space to put this down guys,  
73 oo  
Chuck AA8VS

## DEC QRP Contests – Thanks to Ken N2CQ

N2CQ QRP CONTEST CALENDAR

40 METER FOXHUNTS

Fox Hunt - Thursdays - 9pm EST, 8PM CST, 7PM MST and 6PM PST.

Info: <http://www.cqc.org/fox>

Truffle Hunt - Thursdays - 30 min before Fox Hunt

Info: [http://fpgrp.com/pig\\_hunt.html](http://fpgrp.com/pig_hunt.html)

QRP ARCI Holiday Spirits Homebrew Sprint (CW) \*\*\* QRP Contest \*\*\*

Dec 1 - 2000z to 2400z

Rules: <http://personal.palouse.net/rfoltz/arci/holispr.htm>

Adventure Radio Society - Spartan Sprint (CW) \*\*\* QRP Contest \*\*\*

Dec 3 - 0200z to 0400z (Monday Evening US/Canada)

Rules:

[http://www.natworld.com/ars/pages/spartan\\_sprints/ss\\_rules.html](http://www.natworld.com/ars/pages/spartan_sprints/ss_rules.html)

QRP ARCI Topband CW & SSB Sprint \*\*\* QRP CONTEST \*\*\*

Dec 4 sunset to Dec 5 sunrise Local time (Any 4 Hrs)

Rules: <http://personal.palouse.net/rfoltz/arci/top.htm>

ARRL 160 meter Contest (CW) ... QRP Category

Dec 6 - 2200z to Dec 8 - 1600z

Rules: <http://www.arrl.org/contests/rules/2002/160-meters.html>

MDXA PSK-31 DeathMatch ... QRP Category

Dec 7 - 0000z to Dec 8 - 2400z

Rules: <http://www.geocities.com/mdxa1/deathmatch.html>

TOPS Activity 80 Meter Contest (CW) ... QRP Category

Dec 7 - 1800z to Dec 8 - 1800z

Rules: <http://www.sk3bg.se/contest/topsac.htm>

The DPX digital prefix Contest ... QRP Category

Dec 14 - 0000z to 2400z

Rules: [http://www.qsl.net/wm2u/070\\_dpx.html](http://www.qsl.net/wm2u/070_dpx.html)

ARRL 10 Meter Contest (CW/SSB) ... QRP Category

Dec 14 - 0000z to Dec 15 - 2400z

Rules: <http://www.arrl.org/contests/rules/2002/10-meters.html>

The Great Colorado Snowshoe Run (40m CW) \*\*\* QRP Contest \*\*\*

Dec 15 - 0200z to 0400z

Rules: <http://www.cqc.org/contests/index.htm>

AGB (Belarus) Party Contest (CW/SSB) (80m)... QRP Category

Dec 20 - 2100z to 2400z

Rules: [http://www.qsl.net/eu1eu/agb\\_party.htm](http://www.qsl.net/eu1eu/agb_party.htm)

Croatian CW Contest (CW) ... QRP Category

Dec 21 - 1400z to Dec 22 - 1400z

Rules: <http://www.sk3bg.se/contest/9acwc.htm>

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 Holiday Milliwatt CW Contest \*\*\* QRPp Contest \*\*\*

Dec 26 - 1800z to 2200z

Dec 27 - 2000z to Dec 28 0000z

Dec 28 - 2200z to Dec 29 0200z

Rules: <http://www.knightflites.org>

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 RAC Canada Winter Contest (CW/SSB) ... QRP Category

Dec 28 - 0000z to 2359z

Rules: <http://www.rac.ca/CANWIN.htm>

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 Stew Perry (W1BB) Topband Distance Challenge (CW) ... QRP Category

Dec 28 - 1500z to Dec 29 - 1500z

Rules: <http://jzap.com/k7rat/stew.rules.txt>

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 Original QRP Contest (CW - 80, 40 & 20m) ... QRP Category

Dec 28 - 1500z to Dec 29 - 1500z

Rules: <http://www.sk3bg.se/contest/origqrpc.htm>

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 Thanks to SM3CER, WA7BNM, ARRL and others  
 for assistance in compiling this calendar.

Please forward the contest info you sponsor to

[N2CQ@ARRL.NET](mailto:N2CQ@ARRL.NET) and

we will post it and give it more publicity.

Anyone may use this "N2CQ QRP Contest Calendar" for your  
 website, newsletter, e-mail list or other media as you choose.

(Include a credit to the source of this material of course.)

72 de

Ken Newman - N2CQ

[N2CQ@ARRL.NET](mailto: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

### 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](mailto:w8diz@cinci.rr.com)

Rick, WB6JBM at [ripowell@mpna.com](mailto:ripowell@mpna.com)

Dan, N8IE at [n8ie@who.rr.com](mailto:n8ie@who.rr.com)

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