



PVRC Newsletter

February 2012

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Maximizing Multipliers – from the PVRC Reflector

To follow up on last month's discussion on maximizing rate (and to fill white space in the Newsletter) I kicked off a new discussion: "***How can I maximize my multiplier count in a contest.***"

This led to inputs from N4ZR, K3TN and N2QT (and maybe others I missed), summarized here:

Double your fun: if you can, go SO2R or at least SO2V. You really need to be running to pick up the mults that only call others. Especially during the low rate parts of the contest it's hard to stick to CQing, but if you have the other radio to S&P on, it's amazing how many good ones call you on the slow run rig - and you stay busy with the other rig!

Leverage your contesting software to the max: When running assisted, learn how to use the Available Mult Q window in N1MM or the equivalent in other contest logging software. Especially if you can operate SO2R or SO2V - use two receivers for “power S&Ping” and put new mults in each and call the first one that is ready to be worked.

Work the Sunday Drivers at the end: Always get on for the last two hours of any contest - a lot of fresh meat stations show up then and are often new multipliers. In general, spend more S&P time on the second day, particularly from ~1600Z on. You'll often run across juicy African and Asian mults by keeping mental track of the times of day there when casual ops are most likely to be on in those areas.

Aim high: When S&P look high up in the band. A lot of the better mults don't like the pileups they draw and will hang out in the 'lower volume' parts of the band.

Round ‘em up, move ‘em out: Try to move multipliers to multiple bands. Obviously, not much of a strategy in Sweepstakes or the WPX contests, but in most other contests an easy way to increase your multiplier count is to ask them to QSY to other bands. Many will move, some won't – it never hurts to ask. In the NAQP contests it is almost a tradition to say yes. If you hear someone else moving a multiplier that you need, follow them to the other band.

Avoid being a DXer: A DL3 or a KP4 s just as exciting a multiplier as a 3Y or a P5. Avoid the temptation to waste time in pileups for the “interesting” multipliers.

Know the openings: those long path openings and the odd paths to AF and SA can bring a lots of multipliers. If you don't get on the air enough to be familiar with the patterns of openings, before the contest use the JAF method: Just Ask Fred.

Review of the Zero-Five Ground Plane Antenna – Don K4ZA

Recently, I found myself working with a client who wanted to return to the airwaves after an absence of over 35 years. While this in itself is not so remarkable (all things considered), what was interesting (all right, troubling) was his home, located in a beautiful neighborhood in Potomac, MD. A tower was out of the question. Indeed, most anything and everything we normally think of for serious antennas were out of the question. While there were plentiful old growth trees surrounding his home, only one was actually on his lot. So, some sort of ground-mounted antenna seemed like the only option. Of course, the presence of oodles of grandkids tangling themselves (or worse, according to the client) in radials ended that discussion rather quickly.

It looked like one of the compromise “half-wave” verticals would be the only possible solution. But Norm Jeweler, long-time PVRcer and owner of US Tower Services, had told me about the Zero-Five GP when we chatted at the Orlando Hamfest last February. So, I headed to the Zero-Five webpage to gather further information. Having already seen their products at Dayton, their construction seemed impressive—heavy duty 6061-T6 aluminum, with nice welds. The client agreed to the purchase. I suggested I buy the antenna, build and install it at my QTH, and then re-install it at his home if it passed muster.

The box arrived, and I assembled the vertical in about 10 minutes. There were no directions, but each telescoping piece of tubing was marked with a Sharpie or some such inked line, indicating where things should go. I connected the feedline and headed to the shack, lugging the old Drake MN-2700 tuner along. The client would be using the internal tuner in his new FT-950, but I'd be forced to twiddle some knobs on the Drake. Here's where things get interesting.

Since I live in a heavily restricted neighborhood myself (only four miles from UNCC, where the XYL works), I've been relegated to an R-5 or R-7 on the back deck for years. Poor performance is the watchword for me with these antennas. The traps always seem to be affected by the weather, despite my best efforts at water-proofing them. The Zero-Five, being a non-resonant design, suffers nothing, other than requiring me to fool the radio into accepting RF with that old Drake tuner. And accept RF it did, and does—now for my MD client.

This antenna truly works - and works well. I had no trouble working lots of DX with it, including cracking some pileups on 40/30, and generating some on 10M, a few weeks back when conditions were so good. I was impressed. So much so that I bought one for myself yesterday, when I discovered they were running a “Christmas special” sale.

If you're forced into an extreme antenna compromise situation (such as CC&Rs, for example), you could do worse than look into the Zero-Five lineup. – K4ZA

Antenna Repairs at W8OHT – John W8OHT



The day after ARRL RTTY Roundup I determined through impedance measurements that I had a perfect short in the coaxial transformer atop my 55 foot-MBA Tower. Since then, with line drawings of Mosley's TA-36 transformer and other needed tech manual drawings (thanks to Frank, W3LPL) I have been able to crank the tower down to 20 feet, tilt it over, and replace the shorted transformer (using a PL-259/ American-made RG-213 assembly picked up at R.F. Connections, and Scotch 88 tape from Ace H., Oakland, MD), and now you can see that it again stands vertical at 20 feet (see photograph) and ready for DX height in the PVRC's spring contest season (at W8OHT). Note: HB'd 40-meter ABG radialed, vertical in background. – W8OHT

The Ghosts of QRP – Peter K3ZM (*with permission from 3830*)

Last night, I had a strange and haunting dream. I had gone to a party that was populated by many of our usual comrades. Ordinarily, I dress up quite proudly for these affairs, but on this evening I was dressed very plainly. It was early in the evening, but several of my friends from the other side of the lake were already there, conversing with other guests. I approached one of them and tried to get his attention. He completely ignored me. Eventually, I began to wonder if he could even see me. I was confused by this, and began to look for another of my friends from the other side of the water.

"Ah," I said to myself. There's Tur. I'll go talk with him. "Hey, Tur! It's Peter, K3ZM." He didn't acknowledge me. "Tur - what's up? It's K3ZM." No response. Worse still, it was as though I was invisible.

I spotted Luis across the room. Thank goodness! He will recognize me, of course.

K3ZM: Luis, what's up? It's Peter, K3ZM.

Luis: (*nothing*)

K3ZM: Hey, it's Peter. K3ZM K3ZM K3ZM!

Luis: huh?

I wondered what on Earth was happening. This was really unsettling. I felt like a ghost. It was still early in the party and at that moment I heard DL6FBL nearby. He was dressed quite prominently and stood out among the other guests. I went over and said hello to him. At first, he was unsure of my identity but eventually he held out his hand and said, "Hello, Peter." But our handshake was somehow unsatisfying and the exchange left me still feeling a bit insecure.

I helped myself to some hors d'oeuvres and walked around a bit. Then I noticed G4AMT across the room. "Hey, how's it going? It's Peter, K3ZM." He replied immediately, "Hello, Peter," and his handshake was firm, warm and dry. "That's more like it," I said to myself.

But then I approached several other friends and, one by one, they acted as though I was not even there. After several disturbing episodes like this, I decided to try congregating with folks who live more in my neighborhood. Some of them acted strangely, as well, but at least they seemed to recognize me. After a while, my older brother came by to say hello. But he also seemed different - nothing like his usual self. He wished me luck and vanished as quickly as he had come. Wow. What a strange party. I did not know what to think.

I wanted to chat with some more of the regulars, so I found a tall, round, stand-up table in a corner of the room where there were no other conversations taking place. I began waving my hands in the air, trying to attract some other guests for a conversation. I decided to offer an incentive: "Hey, come over and talk to me! I'm K3ZM. I can provide you with four free hors d'oeuvres if you join me at my table for a moment." My incentive plan worked for a while, but eventually interest in the free hors d'oeuvres faded and I was back to trolling the party for interesting conversation.

Ahah! There's good old Herb behind the bar pouring drinks. You can always count on Herb to be here! I walked over and requested a drink, but some guy from Indiana sneaked ahead of me. I frowned in annoyance as Herb handed him his drink. Herb and his neighbors always serve me first. Always. Without fail. I shrugged my shoulders and started to request my drink, but some other guy muscled in ahead of me again. This is ridiculous! These guys don't seem to understand the program. I always get my drink first at this bar. Finally, it was my turn. I was actually relieved when Herb said, "Hello, Peter. What will you have?" "Rum punch," I said. "And you had better make it a double."

Much later in the evening, as the glow from the rum punch faded, I noticed one of Lloyd's neighbors. They live in a multi-family dwelling not far from his location. "Aloha, dudes!

It's Peter, K3ZM." Nothing. I tried again. Finally, "K3ZM K3ZM K3ZM!" No recognition. They did not realize that I was there.

Eventually, the party faded into a blur as the guests thinned out and it got very late. It was a most unsatisfying evening. I began to lose track of where I was. . .

I awoke in front of my radio confused and disoriented. I rubbed the sleep out of my eyes. I must have fallen asleep at the key. The sun was rising over the Bay. The bad dream was beginning to fade. I reached down to the little black knob at the bottom of my radio and turned it clockwise until the screen read the usual 37W. I then turned to my left and hit the rocker switch on the 91B. The wait light glowed red. The Earth was beginning to turn properly on its axis again. I poured a hot cup of coffee and started to feel normal. Then I decided to compose myself by re-reading the current issue of CQ. Thank heaven it was all just a dream.

73, Peter K3ZM - with congratulations and many thanks to: DL6FBL, G4AMT, OL1A, SM2CEW and CE1/K7CA in the recent Stew Perry

Classic KH6IJ Article “Tips for the CW Contester and DX'er”– from Frank W3LPL

Frank pointed out on the reflector that you can now read old copies of 73 Magazine online [here](#). Frank highlighted a classic article by Katashi Nose KH6IJ in the February 1968 issue that has much advice that is just as good today as it was 45 years ago – though logging software has changed things a bit...

Since this is a contesting club newsletter, I'll highlight the last line in this piece:

“Traffic handling, ragchewing, net operation, RTTY, VHF, have been tried but there is nothing like a good hot DX contest to test men and equipment.”

Tips for the CW Contester and DX'er – Katashi Nose KH6IJ 73 Magazine, February 1968, p.52

Equipment

Go as high power (to the legal limit) as your budget and facilities will allow, "Low power is all one needs for DX" is sour grapes and unrealistic. I have worked the East coast of the USA from Hawaii on 160 meter CW with 25 watts to a guy wire and have been on the receiving end of a chap in Arizona using 6 milliwatts on 28 MHz CW, but that's for the birds if you want to enjoy DX without waiting for that freak break.

Low power may be fine for the higher frequency bands but on the lower frequency bands it is a waste of time, Likewise stacked arrays, long booms, and high structures are fine if you can afford them, but I have found that the mental strain in a wind storm is not worth the price. Frankly, there is little to choose between a quad and a Yagi as long as you

have some kind of a Beam with reasonable radiation efficiency, I have been through many cycles including stacked four over four beams, rhombics, and 45 foot booms, some of which are described in the antenna handbook and magazine articles.

A good receiving location is more important than long booms and superheights or yagi versus quad arguments. Let's face it, some of us are not situated to work DX.

Would you care to compete in the Indianapolis Classic in your family car? Get the best there is that you can afford, either homebuilt or commercial made. The qualities to look for in a CW receiver are controllable selectivity, fast recovery and freedom from front-end overloading. My contest contacts jumped a good deal when I switched from conventional IF to mechanical filters,

Lest you think that I am a button pusher, let me say that I entered the first few DX contests with a microphonic 201-201-112 combination in which one did the fine tuning by body English (leaning forward and backward to the right position after each transmission). Later a National FB7 was used which had only M inch (not misprint) of bandspread for the whole 20 meter band. There was no such thing as zero beating a station because one couldn't find zero beat. However, for those who were fastidious, one could shut off the plate voltage and by holding the key down and letting the filament voltage provide a 60 cycle buzz of a sort, one could get near the correct frequency (wavelength in those days).

To zero or not to zero

In CW work there is no choice but to zero beat. Listening up five (or ten) merely serves to clutter up the band. How would you like to work in a net in which each station was on a different frequency? A party line is what you want, so that everyone knows what is happening and where he stands.

The average CW man is smart enough to learn very quickly which way the wind is blowing. It doesn't take him long to find out that he is making an ass of himself by getting out of phase,

A good operator can take complete control of a frequency, I have heard operators who spend more time complaining of the QRM on their frequency, and trying to line them up in proper numerical order, than working them. If the QRM gets out of hand, one can always get out from under and sneak up on a new frequency.

Work stations and reduce the pile in natural order, the loudest ones first (with exceptions mentioned later) and get rid of them so you can work down into the weak layer. If you find that they are all about the same strength, tune off to one side just a little (something you cannot do with SSB very far). It is very seldom that everybody will be exactly on the same frequency, Work slightly around the edges of your frequency and back and forth across your frequency. Let your ear separate the slightest frequency differences. If you cannot do this you need more practice.

The operator

One must keep in condition to be able to work a successful contest. Be able to copy 50 words per minute in your head and to take down 35 words per minute solid. Logkeepers and spotters are a waste of time and as necessary as the fifth wheel.

The bottleneck is not spotting or logkeeping, but the operator on the other end. You can catch up on your log keeping while the other operator is sending. You will find ample time for logkeeping and other bookkeeping chores while the other fellow is sending, except when you hit an operator who has been around contesting a lot. If you meet two or three of these fellows one after another you will find yourself three or four contacts behind in logging. However, there is a trick in this situation too. Simplify your numbering system, what difference does it make to anybody whether you pass out a 599 or 579, you might as well give them all 599. The chances are he will also give you a 599 so why complicate bookkeeping. Moreover, a good report makes the other operator think that he is getting in loud and clear and will make the contact short and fast.

To squeeze out that weak one employ the following technique. Hold your breath, close your eyes, cock your head and concentrate. Incidentally, I have found that this works for hearing tests as well. I presume you use earphones, because if you use loudspeakers you are not a CW Dx'er, note I didn't say phone Dxer because quite a number of hams apparently don't know that one can monitor the quality of one's transmission by using earphones and your own receiver. If you use a transceiver, of course you are out of luck.

The stethoscope type of earphone allows you to wear glasses in comfort since you will be operating for 8 hour stretches. The old earmuff type (Brandes, Baldwin) phones made your ears feel as if they were ready to drop off after a few hours of use.

When your contacts start falling off to less than 30 an hour, it is time to catch up with a catnap. Get a good rest of at least six hours every night.

Special techniques

Unless you can get into the dense ham population area you might as well forget about becoming one of the top scores. In the ARRL DX Contest, this means that you must put in a good signal into the second and third call areas for at least 14 hours a day. There seem to be a lot of W6s but you will find that they get fished out very quickly. The second and third districts will furnish an inexhaustible supply of weak ones.

If it is a world-wide competition (CQ type), unless you are situated to work into Europe, you are not going to be among the world high. The South American CW contester is a rare bird, and you can't get many CW multipliers from the North American continent.

Know when special openings are going to take place and be there with proper schedules. Special openings sometimes are of only a few minutes duration. For instance you can work that WI on 160 meters just as the sun is rising on the East Coast. He will peak up and rise out of the noise level and disappear again only once.

On the low frequency bands, don't get sucked in by the first loud station who calls you. He can serve a useful purpose by using him as a bait. Let him call you but don't answer for a while. His cry of anguish will alert the band to the fact that something interesting is underneath. When the pack becomes thick, pick them off one by one. This technique will save a lot of CQing on your part on the low frequency bands.

However, certain non-DX types will fool you because he gives up easily and quits after a few calls. Cultivate a clientele and learn their habits and foibles. You will find that certain ones will always be there as soon as you open up on the band. Make a habit of opening up on a certain band at a set time, the old timer contester will be there waiting for you. W9IOP, W4KFC, W3MSK, W3GRF, W6RW, to name a few, don't get rattled easily. They will quit if they don't get you in the first few calls, knowing full well that their time will come around when the hue and cry subsides. Learn to recognize fragments of familiar calls.

Don't fold up in the face of competition, the opposition can always blow up a power transformer or have a social engagement the second weekend. Don't show your hand but keep the opposition guessing, and in this respect serial number sequences are less desirable since it involves one more type of bookkeeping. Multipliers will take care of themselves if you pile up the volume. Do not keep the other station guessing by changing pace. Set up a definite sequence and stick to it. Deviation from a sequence or change of pace only serves to confuse the operator at the other end. When you go back to a station, his call will be lost in a pile of QRM and he will know who you went back to. Therefore it is important that you reassure him by signing his call at the end of an exchange plus your call. Signing your call at the end advertizes your presence on the band and prevents queries as "what is your call?" Sign your call only once, no more, after all, they know who is being hunted. A mere "break" only serves to get several other stations acknowledging you, each one thinking that he has nailed you.

Learn to copy a fast sender through a slow sender. Many times you will find that someone who calls very slowly will be in harness with a fast caller. Get rid of the fast caller with a fast exchange and then go back to the slow one, He won't know the difference. If the slow caller (long caller) unexpectedly signs early, a short "QRZ" will keep him going for another round until you are ready for him.

Sometimes you will find two stations sending you a serial number each thinking that he has mailed you, A short "ok" at appropriate intervals will hold both for you until you sign out both calls. However, this last trick calls for considerable practice and finesse because you can get into an awful mess by losing synchronism.

Logkeeping

Use carbon paper and send in the carbon copy (FCC says you must keep original logs.) The standard ARRL logbook is good for only 29 contacts per page and is not recommended for contests in the order of 4000 contacts.

It is amazing how well one can keep track of duplications after a few years of practice. The average contester has a pretty foolproof filing system so let him do the work for you. You will not have time to keep track of multipliers at first, Leave that chore to a slack period, You are less liable to make mistakes this way.

Hang on to that ballpoint pen at all times and don't lay it down. Learn to send on the bug while holding the pen in the same hand. The other hand can be arranging papers or adjusting controls while you are sending. Can you imagine picking up a pen and laying it down 8000 times which is what one would do in the course of a good hot contest.

A parting shot

Over 8000 contacts were made in the 1967 ARRL DX Contest from a 5000 square foot city lot using a tribander and antenna system described in a recent magazine article with a 40 foot tower from 160 meters through 10, Tower guy wires were used as radiators for the low frequency bands. For the contest antagonist, let me say that I have been through the public interest and necessity bit. Ask any old timer about the relay circuit from KA1HR (Manila, OM1TR (Agana) to NY2AB (Coco Solo) to W3CXL (Washington DC). There was none of this "a phone match is in progress and a clear channel will be appreciated" stuff. Message traffic ran up as high as 4000. Traffic handling, ragchewing, net operation, RTTY, VHF, have been tried but there is nothing like a good hot DX contest to test men and equipment.

Welcome New Members – W3LL

Please welcome the following new members who were voted into PVRC during the months of December and January:

- In the North Carolina East Chapter, Paul K5ESW and Bob WX4G
- In the Annapolis Chapter, Keon KE3HAY

Upcoming Contests and Log Due Dates

Contests This Month

- Feb 5 – NA Sprint CW
- Feb 11 – WPX RTTY
- Feb 11 - PACC
- Feb 12 – NA Sprint SSB
- Feb 17 – ARRL DX CW
- Feb 24 – CQ 160 SSB
- Feb 25 – NAQP RTTY

Logs Due This Month

- Feb 4 – NAQP SSB
- Feb 7 – ARRL RTTY Roundup
- Feb 22 – ARRL VHF SS

See WA7BNM's [Contest Calendar](#) for more detail and the latest information.

The Editor's Last Word – John K3TN

In this issue I included the fantastic KH6IJ piece that Frank W3LPL pointed out from the February 1968 issue of 73 Magazine. That same issue had an article “How is your Club Paper? Good or Bad?” by Ralph Steinberg K6GKX that started out with:

“There are two categories in which papers (club newsletters) can be classified. Either they are good or bad. Bad papers have no business to be published as they serve no definite purpose, If your club paper depends on gossip, bits of wit or other nonsense to fill space, your club would be better off ceasing publication.

The reason for having a good paper is to furnish the membership informative news, technical information, projects and activities so that it can be a good communication link for the club membership. Very frequently papers of this type help to interest new members for your club.”

Thanks to Don K4ZA, Peter K3ZM, and John W8OHT for submissions for this month's newsletter. If you have any post-contest write-ups, or cold weather antenna projects you are proud of, drop me line [here](#).

– 73 John K3TN

Member Classified Ads

Your Ad Here!



Eyeball QSO Directions

The latest info on local club meetings and get together will always be sent out on the [PVRC reflector](#) and posted on the PVRC [web site](#).

NW Region:

Meetings are generally held on the third Tuesday of each month at the City Buffet, 1306 W. Patrick Street, Frederick, MD. (301) 360-9666. It's in a small shopping center. Most arrive about 6 PM for dinner and informal discussions. The meeting begins at 7:00 PM.

From W. Patrick Street, turn up McCain Dr. (the Mountain View Diner is on the corner), then turn right into the shopping center, then turn left and search for a parking place. The City Buffet is tucked back in the left corner of the shopping center behind the Mountain View Diner. You can't see the City Buffet from W. Patrick Street.

Contact: Jim [WX3B](#)

Central Region

Meets monthly the second Monday of each month, except June, July & August). The location alternates between the below MD and VA locations. Pre-meeting dinners start at 6:00 pm and meetings start at 7:30 pm.

VA LOCATION: Anita's, 521 E. Maple Ave, Vienna, VA. Tel: 703-255-1001. Meets at this location during the months of February, April and October.

Contact: Rich [NN3W](#)

MD LOCATION: Topolino's, 6320 Old Branch Avenue, Temple Hills, MD. Tel: 301-449-6160. Meets at this location during the months of January, March, May, September and November.

Contact: Mark [KD4D](#)

The Laurel, MD Region: Bill N3XL

The PVRC get together is held at the first LARC meeting each quarter at the clubhouse.

The Annapolis Crew : Dan K2YWE

Meetings are held on the 4th Wednesday of each month at Broadneck Grill in Annapolis. We gather at about 5:30 PM and order dinner about 6. We break up usually before 8 PM. E-Mail [K2YWE](#) to be put on the e-mail reminder list.

PVRC-NC

The PVRC NC-East chapter meetings are held at [Manchester's Bar and Grill](#) on the 9100 block of Leesville Rd. in North Raleigh, with "QRM" beginning at 6:00pm and the dinner meeting following shortly thereafter. The meeting is held monthly on the 1st Thursday of most months, cancellations or changes usually announced on the [PVRC-NC website](#).

[The PVRC NC-West Chapter](#) holds its meetings on the 4th Monday of each month at [the Mellow Mushroom](#), 314 W. 4th St., Winston-Salem, NC. Ragchew at 7:00pm, dinner meeting starts at 7:30pm. All contesters and interested guests are invited!

Central Virginia Contest Club: Ed NW4V

Meets the first Tuesday of the month at St. Martins Church, 9000 St. Martin Lane, Richmond VA, (between W. Broad St. and N. Parham Road). Our meeting begins at 7PM.

Over the Hill Bunch:

The group meets for lunch at noon alternately in Maryland at the College PARK Holiday Hotel Route 1 and the Beltway or in Virginia at the Parkview Marriot near route 50 and the Beltway. Meetings generally are held on the last Wednesday of the month and are subject to change. Meetings are announced by E-Mail.

All PVRC members, non-members interested in membership and guests are welcome. For information contact Roger Stephens, K5VRX, 703-658-3991 for Virginia meetings; or Cliff Bedore [W3CB](#) or get on 147.00 for Maryland meetings.

Downtown Lunch Group

Meets on the 3rd Wednesday or Thursday of the month in the downtown area of Washington, DC. Locations occasionally change, but are always Metro accessible. Details are sent out on the PVRC reflector. Feel free to contact Eric W3DQ or Brian WV4V for details and directions.

Southwest VA Chapter:

The Southwest VA group meets each Wednesday at about 8:30 AM at Hardees at 20265 Timberlake Road in Lynchburg, VA. This is an informal gathering, but normally about 10-12 attendees. Contact Mark Sihlanick N2QT, Tel: 434-525-2921

If you'd like to add or correct a listing, contact K3TN for inclusion in the Newsletter!

Now a Word From Our Sponsors

PVRC doesn't ask for dues, but the Club does have expenses. Please send PayPal donations via DAVE@WR3L.NET or by snail mail to Dave's address at QRZ.com. You can also support the Club by buying from the firms listed who advertise in the newsletter, or by getting your company to sponsor the newsletter!

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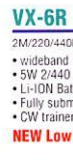
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