



Potomac Valley Radio Club Newsletter

April 2004

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Welcome to Brian Wruble, W3BW, Al Waller, K3TKJ, George Marzloff, K4GM, and John Humphrey, W4IM, new members of PVRC.

Editor's Note

By Pete Smith, N4ZR

This issue begins with serious articles by K4VV and N3OC — please take the time to consider what they have to say. Bill Axelrod, K3WA, starts his new column, *Ammunition for Little Pistols*, concentrating on ideas for how ops at smaller stations can maximize their fun and contest results. We also have a report from FS5UQ in the ARRL DX CW test, just over, and an enlightening article by Fred Laun, K3ZO, on the mysteries of summer propagation.

Due to the press of business, Chuck Watts, W4XP is taking the month off, but his *VHF and Above* column will be back in June (May is the Reunion issue).

Enjoy!

Legislative Affairs Affecting Ham Radio – Help Needed From PVRicers!

By Brian McGinness N3OC

Many of you have probably heard about the FCC's Notice of Proposed Rulemaking (NPRM) concerning BPL, as well as two pieces of legislature in Congress that will affect ham radio. Now is the time to file your comments in response to the NPRM, and write your representatives in Congress asking them to co-sponsor the two pieces of legislation if we hope to succeed with these initiatives.

Our frequency allocations are in danger, now more than ever before. Even though the ARRL has done everything they can to make things go our way, it looks like it will not be enough. That is why we need as many PVRicers as possible to file response comments to the NPRM, and contact their representatives in Congress and ask them for their help in these matters.

The focus of this article will be to explain what the issues are, how to find out who your representatives are, and how to ask them for their help.

The issues in front of us are of course BPL, plus two bills currently stuck in committee in Congress. The first bill is H.R. 1478, the "Amateur Radio Emergency Communication Consistency Act" which would make PRB-1's requirement of reasonable accommodation for amateur radio antennas applicable to private land-use covenants. The second bill is H.R. 713/S. 537, the "Amateur Radio Spectrum Protection Act of 2003" which would require the FCC to replace any amateur radio frequencies re-allocated for other uses with equivalent spectrum.

BPL is the most time-sensitive of these issues, so I am asking that everyone address BPL by filing comments in response to the NPRM on the FCC's website.

The FCC has issued a Notice of Proposed Rulemaking (NPRM) concerning BPL. This has to be published in the Federal Register which starts a 45 day reply comment period. This was published in the Federal Register on March 17, which

starts a 45 day window for comments and then a 30 day window for reply comments, meaning the final deadline is June 1st. So as you can see, we have a very limited time period left in which to act. More information is available on the ARRL's web site at <http://www.arrl.org/news/stories/2004/03/18/100/?nc=1>

I am asking that PVRicers immediately file your own brief comments against the NPRM with the FCC. Your comments need to make reasonable arguments dealing with the issues that are adverse to ham radio. Simply filing comments that BPL is no good, or should not be allowed will probably not be effective. Your comments need to be clear, concise, and speak to the issues, and if at all possible, offer alternatives. For now, that is all that the ARRL is asking us to do. According to K1ZZ, a plan is being developed at the League to ask us to contact our Congressional representatives concerning access BPL, should it become necessary.

The FCC especially needs to hear from anyone who has first hand experience with interference from an access BPL system. One of the problems we face is that the operators of the systems deployed so far say that they have not received any reports of interference to ham radio, and this is frequently cited by the proponents of BPL. I am sure this is because the test systems are only in limited areas, and once widespread deployment occurs, we will all be complaining about interference. And the ARRL has proven to me that the test systems DO cause harmful interference to the ham bands, but first-hand experiences always carry more weight.

Everyone should read the NPRM. It can be viewed at: http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-04-29A1.doc or on my web site at: <http://n3oc.dyndns.org/FCC-04-29A1.doc>

The NPRM maintains the current emission levels allowed by Part 15. Even at the current levels, access BPL would create massive interference to any amateur radio station that happened to be located nearby. It may technically be possible to filter out the ham bands, but the test BPL systems deployed to date do not filter out the ham bands and render them useless, so at least so far this capability has not been demonstrated.

Even though the NPRM says we will be protected from interference, exactly what is *interference*? This is not defined in the NPRM, and I strongly suspect that what the FCC and BPL industry will define as interference will not be the same as you or I would. I would define interference as a rise in the noise level that would inhibit me copying a weak-signal station, as we frequently have to do both in contest and public-service situations. You can bet they will define it as something else, so I am very afraid that even though the NPRM has protection for us against interference, it will be of little practical use.

Once you have read the NPRM, we need our members to file their brief comments against the NPRM. Suggested wording is available, but it is better if each comment or letter is unique and not an obvious form letter. Comments by Jim Talens, N3JT, addressing specific points in the NPRM are on my web site at: [http://n3oc.dyndns.org/N3JT Comments on BPL NPRM.txt](http://n3oc.dyndns.org/N3JT%20Comments%20on%20BPL%20NPRM.txt) and can be used as a basis for your comments to the commissioners.

The FCC asks that "parties responding to the Notice of Proposed Rule Making submit comments, replies and any other pleadings or information only in the newly established ET Docket No 04-37. Written comments may be filed via the Electronic Comment Filing System (ECFS) <<http://www.fcc.gov/cgb/ecfs/>>. When submitting a comment or viewing filed comments, ECFS users should type "04-37" (without quotation marks but including the hyphen) in the "Proceeding" field of the ECFS on-line form. Do *not* use the *NPRM's* FCC document number when filing or searching for comments. The ECFS permits attaching a file containing detailed comments prepared off-line. The Commission reminds that commenters should include their full name and US Postal Service mailing address when completing the transmittal screen. ARRL says that the FCC ECFS Express system <<http://gullfoss2.fcc.gov/ecfs/Upload/>> also now is accepting brief comments on the BPL proceeding, which is the top item on the list.

I am also asking that everyone that is willing write their representatives concerning the two pieces of legislation that have been introduced concerning ham radio, asking them to become co-sponsors of these bills in order to generate enough inertia to get them out of committee and to a vote. You can check the ARRL web site to see if your representatives are currently co-sponsors, and if they already are, write them to tell them you support the bill.

Both of these bills are stuck in committee, and have been for over a year. Having more co-sponsors will generate momentum with the hope that these bills can be brought to a vote soon. Both of these bills are non-partisan, and should be of equal interest to both political parties in Congress.

To locate your elected representatives and their addresses, go to: <http://www.congress.org/> and enter your zip code. Have

your nine-digit zip code handy as some Congressional districts can cross zip code lines. Written letters are more effective than emails.

The first piece of legislation, H.R. 1478 is the “Amateur Radio Emergency Communications Consistency Act”, sponsored by Rep. Steve Israel (D-NY). The link to the text of this legislation on the ARRL web site is <http://www.arrl.org/govrelations/hr1478/>

This bill simply requires that PRB-1, which requires reasonable accommodation to amateur radio antennas by state and local governments, also apply to private land-use agreements (covenants). This can be a controversial subject, and Congress is usually reluctant to become involved in private contract matters. You will have to make your own decision here. It doesn't seem fair that TV antennas and one-meter satellite dishes enjoy preemption of covenants, while ham radio antennas do not.

This bill currently has 19 co-sponsors, including one from MD, two from VA, one from PA, and one from NC. If you elect to write your representatives, ask them to become co-sponsors and/or support this legislation. A sample letter is on the ARRL web site at <http://www.arrl.org/govrelations/hr1478/sample-letter.html>

The second bill has both a House and Senate version, and is less controversial. H.R. 713 and S. 537, the “Amateur Radio Spectrum Protection Act of 2003” requires that the FCC make no re-allocation of primary amateur radio frequency bands, not diminish the secondary allocations, and make no allocations to other services that would diminish the usefulness of the bands unless the FCC at the same time provides equivalent replacement spectrum.

The text of this bill is on the web at <http://thomas.loc.gov/cgi-bin/query/z?c108:h.r.713>:

I am not a lawyer, but the way I read this bill it might be able to be invoked if the FCC were to continue forward with BPL and it were to diminish the usefulness of our existing allocations.

This bill currently has 92 co-sponsors in the House, and 8 in the Senate. You can check using the ARRL web site to see if your representative is a sponsor or not. In my case, my Representative is a sponsor, but Maryland's Senators are not. A sample letter to send concerning this bill is at <http://www.arrl.org/govrelations/arspa.html#sample>

I would like to thank everyone for their time in considering these important issues, and urge you to file your comments against the NPRM and contact your elected representatives soon.

PVRC Event Calendar (includes summer get-togethers)

Note: All dates are Zulu, boldface denotes contests that count toward the PVRC 5 Million Award and summer PVRC events

CQ WW WPX Contest, CW 0000Z, May 29 - 2400Z, May 30 (starts evening of May 28 in the US)

PVRC Reunion June 5-7 (details in next month's Newsletter)

ARRL June VHF QSO Party, 1800Z June 12 - 0300Z June 14

W3LPL Open House, June 19 at noon, rain or shine

ARRL Field Day 1800Z, Jun 26 to 2100Z, Jun 27

IARU HF World Championship 1200Z, Jul 10 to 1200Z, Jul 11

North American QSO Party, CW 1800Z, Aug 7 to 0600Z, Aug 8

WAE DX Contest, CW 0000Z, Aug 14 to 2359Z, Aug 15

Maryland-DC QSO Party 1600Z, Aug 14 to 0400Z, Aug 15 and 1600Z-2359Z, Aug 15

W3YOZ Fowlfest, August 21

North American QSO Party, SSB 1800Z, Aug 21 to 0600Z, Aug 22

NR4M Open House, September TBD

For schedule changes, rules and log submission info, go to <http://www.hornucopia.com/contestcal/contestcal.html>

From the President

By Jack Hammett, K4VV

BPL is a serious threat to the quality of our bands in the future. Jim Talens, N3JT, is leading an effort to respond to the NPRM from the FCC, and we all need to help build a strong input from PVRC. Brian McGuiness, N3OC, is leading initiatives to achieve PVRC input on the BPL issue, H.R.1473 ("Emergency Communications Consistency"), and H.R. 713/S. 537 ("Spectrum Protection Act"). Please read Brian's lead article in this newsletter carefully. This is a time for action!

The officers are considering some adjustments in the By-Laws to coordinate with the Trustees and prepare for action this summer. Membership requirements and voting procedures in our regional environment are being addressed.

Congratulations to all of you who are participating in contests and turning in scores that add to the strength of PVRC. I ask every leader in PVRC, and every mentor who sponsored a new member to search out and encourage others to operate in the contests. Let's continue to grow our capabilities and our competitive performance as individuals and as the PVRC.

The threat of terrorism is a reality in our environment. Our help may be very important in the future. We have important capabilities; do we have a responsibility? Further comments on emergency communications follow.

Emergency Communications

By Jack Hammett, K4VV

Amateur radio operators have often stepped forward to provide critical communications in a wide range of emergencies. We all know the background. Is there a link between contesting and emergency communications? I believe there is, because we have skills and station capabilities that may provide the key margin of success in dealing with future emergencies.

I am personally interested in emergency communications because of my background, including (1) handling messages for tornado victims in Arkansas in the 50's, (2) being the on-scene link for communications to support the evacuation of threatened soldiers from a small island in the Pacific during a serious typhoon, (3) doing the communications to extract wounded soldiers and airmen in Viet Nam, (4) leading a team to escort the movement of nuclear weapons, with communications as a critical capability, and (5) many other Army experiences providing communications for combat and field operations. It is very satisfying for us to use our personal skills to do something that is very helpful to others.

Contesters have unique skills and capabilities: (1) the ability to operate in difficult communications conditions of noise and weak signals, (2) the ability to exchange information quickly with accuracy and computer entry, (3) the training for endurance, "staying in the chair", (4) the wide experience with various radios, antennas, and propagation conditions, and (5) the well equipped stations. All this, and we enjoy it!

Because of our operating skills and station capabilities, we will certainly step up to help others in a serious emergency. We have a duty to do so, as we are able to do what others are not. Think of how doctors and firemen behave when they encounter an emergency where their skills are key. The neighbor who went into a burning house near Manassas recently to rescue a child was at the right time and place for his personal initiative to make a difference. In this current world environment, we may each face our day when it is time for our personal action. We are all willing and able to help, but we won't be ready and able unless we do some practice and training in the emergency communications systems.

I have always known that I would step up to help when needed, but when I talked with the Loudoun ARES coordinator recently, he made clear to me that to be seriously helpful, I would need to get involved in ARES (or other programs) in advance, to be effective when the emergency strikes. We are not credible with government officials who need the support unless we are known and have "access" before the emergency occurs.

Most of us probably have less interest in rushing to the scene with the handheld or mobile communications capability, than in providing the "backbone" links, using our home stations. That is my thought.

Another reason that I became more active in pursuing emergency communications is that I found that there is very little respect in Government for the capabilities of amateur radio for public service. Two prominent lawyers counseled me not to use "contesting" in my document to try to convince the county that there was a legitimate reason supported by the public interest to approve multiple towers (i.e. "antenna support structures"). Contesting is viewed as "little boys racing

power bikes in the woods,” and as a pleasant distraction without substance or value. Instead, the emphasis might be placed on International Communications, supported in the law for amateur radio. In short, we get little respect in the public domain. We need to demonstrate the value of what we do in supporting the public interest. This point applies to our local interests (such as tower permits) and to our national interests (such as protection from BPL noise pollution and covenants which inhibit amateur radio operations).

The super equipped stations in PVRC would be the natural “backbone” capability in a serious emergency network, and others are natural tributaries or supporting stations. The packet network and voice repeaters provide additional capabilities. We might prepare for emergency service by improving our own stations (as we are doing anyway), and by doing occasional short practice drills from our home stations.

Tom Abernathy, W3TOM, is pursuing some of these thoughts on his own initiative within the ARRL structure. Tom is planning an upcoming guest speaker for the Central meeting to address the topic which has been a topic of discussion at the last two Central meetings in Maryland. I am personally interested in these activities and in exploring whether there is a secondary role for PVRC in emergency communications. Perhaps as the backbone system in the National Capitol Region and the surrounding “circle of six states.”

PVRC has a contesting mission, not an emergency communications one. Those of us in PVRC have the right capabilities. We know one another and work well together, so we have an informal community for dialogue within PVRC. We could start an emergency communications interest group if there is interest. I know that many of you are already active as individuals in your local communities. Your comments are welcome.

Contesting Near the Summer Solstice

By Fred Laun K3ZO

Almost ever since I have been contesting I have heard and read complaints from contesters about the contests that take place near the longest day of the year here in the Northern Hemisphere. In particular I am referring to the CQ Magazine WPX CW Contest in late May and the IARU HF World Championship in early July. What seems to bother people the most is that the operating patterns for the year's other major contests don't hold up for these contests. This supposed unpredictability is seen by them as a drawback.

My own view has always been that each contest brings its own peculiar set of conditions to the table, and the variety of circumstances from one contest to the next is one factor in making contests challenging and interesting to me. As we go further down the sunspot ladder to the bottom of this cycle, I would even venture to say that these two contests gradually become the most entertaining, because they are the ones least affected by the solar cycle. To some degree, the greater the amount of time the Sun shines on us each day, the lesser the effect its spots have on our conditions.

Let's take a look at the WPX CW Contest. In late May, even at the lowest point in the sunspot cycle, we will have conditions to Europe on 20 meters when the contest starts at 8 PM local time. The Sun hasn't set yet as the contest begins. The band will be open to all of Europe and it will be particularly good to UA9-land. Therefore it pays to start out on 20 and spend the first hour there before going to 40. This gets us off to a good start rate-wise.

You do want to get to 40 fairly soon after the start, however, because the opening to Eastern and Northern Europe on that band closes pretty early this time of year. For example, the Sun is already rising in Moscow just as the contest begins; in Helsinki there is only about an hour to go before sunrise as the contest gets underway. Even in London, the Sun is peeking over the horizon after the contest has been going on for only four hours.

It is well to recall that since multipliers count only once, and not once per band, there is no percentage in going to 80 meters the first night unless the other bands are simply not productive. (All right, I don't do SO2R; if you use SO2R, it might be OK to do an S&P run on 80 now and then while running on 40 or 20.) Basically, with there being so many multipliers available, and since they can only be counted once, the WPX more than any other contest amounts to a rate contest, where keeping up your rate is the all-important factor. So the first few hours are best spent toggling between 40 and 20 meters.

At this time of year you will not experience the 40 meter dead time to Europe that has been discussed in these pages recently. Forty will be fine until the Europeans get their sunrise. And when the 40 meter European opening is over, you will find great conditions on 20 to most of Europe and Central Asia all night long. Around 4 o'clock in the morning the

JA's join the crowd on 20. They will be in until 8 or 9 AM local time. That's right, the best openings to East Asia this time of year are in the early morning and not in the early evening as we have been accustomed to seeing them.

The WPX has a time limit of 36 hours for single operators, so the decision as to when to take off time enters the mix. At the bottom of the sunspot cycle, for most of the major contests we find that the period between the time when 40 meters closes to Europe and the time when 20 meters opens to Europe is the best time to get some shut-eye, because there's not a lot of volume to work during that interval of time. The WPX CW is different; you NEVER want to take time off during the hours of darkness at the bottom of the cycle in this contest, because darkness is when conditions are best and quietest.

After the Sun has been up for a couple of hours signals start to suffer greatly from solar absorption this time of year. Fifteen may be open to Europe but during the morning hours signals will be puny weak. After the JA's drop out on 20 it is a good idea to think about off time. If 15 is open to Europe, the best signals will be heard in the late afternoon when the Sun has been shining on the ionosphere for a while, gradually raising the MUF, and the Europeans are already approaching darkness, cutting down on the absorption on that path.

That's right! Napping in the middle of the day is the best strategy for this contest. It would be fatal for a would-be winning effort in the other major contests of the year, but not for this one. Since you have to take some time off, this is when to do it.

One unknown factor at this time of year is the presence of Sporadic E propagation. This contest occurs at the very beginning of the Sporadic E season, so it is not likely that Sporadic E will be much of a factor, but there might be some. A wonderful graphic image of the trans-Atlantic sporadic E likelihood from day to day is available on the Web at http://www.conknet.com/~b_mobile/EW_PROB.htm. As you can see, this will be an important factor in the IARU HF World Championship, which will be the subject of my article next month.

What about 10 meters, you might ask. At this point in the sunspot cycle it's not likely to be of much use, though it should be open to South America this year at least. There will probably be a few LU and LW prefixes there that will not be available on other bands, so when things really get dull, you might make an S&P pass through 10 meters in the mid or late afternoon with the beam south.

Of course domestic contacts now count one point in this contest, and you need domestic prefixes for multipliers, so the best strategy for working domestic stations is that, when the rate drops off to Europe and Asia to the point where you feel it is unacceptable for your particular operation, that's the time to point the beam west and start making hay with the W's. But as long as your rate is satisfactory into Europe or Asia, keep the beam there and leave the domestic stations for later.

As I say, next month we'll talk about the IARU. In the meantime, good luck!

Ammunition for Little Pistols

By Bill Axelrod K3WA

Some guys just can't catch a break. Less than one day after the ARRL CW DX 'test Dan, K2YWE, published an insightful email entitled "K2YWE after action ramblings". Well, I just had to go and open my big mouth (or small keyboard) to say in an email that I thought Dan raised some real good ideas and that this type of discussion is very helpful for us "little guns" and should be followed up.

Pete, N4ZR, struck like a doggone cobra. My arm still smarts from the twisting and I quickly agreed to try a monthly column in the PVRC Newsletter. So, folks, here goes:

Inside every little gun there's a big gun waiting to get on the air. And no, for those of us around my age and body shape, that's not why our bellies reach the wall before our toes do. But that's another subject.

(Continued on page 7)

**Don't miss this year's remaining 5M Contests --
WPX CW May 29-30...ARRL June VHF QSO Party June 12-14**

GO PVRC!!!

Yeah, I know – we’ll all be big guns when we grow up. Someday. Run 1500 watts, have a 4 square on 160, towers that reach the sky, and stacks of mono-banders from 80 to 10. But not today.

There’s a lot of reasons why many of us PVRCers are little guns. Maybe we don’t have the cash for a big station, or perhaps our “better halves” won’t let us spend what we have on more ham stuff. **“Jeez, Bill, how many darn radios do you need anyway?”** Maybe we don’t have the real estate, or antenna-tolerant neighbors, or have RFI problems, or whatever. **So what!** We still enjoy contesting (why else would you be reading this?).

Today, we little guns have modest stations. Maybe QRP or 100W or even a small amp. Wire antennas or perhaps a small, low tribander. But we do get on the air, we enter the contests. We have fun. And our scores contribute to PVRC’s totals. And whether we’re new to ham radio or have been hams longer than we care to admit, we all want to improve our contest scores regardless of the size of our guns.

So, with Dan’s ideas and Pete’s encouragement, I’ll try, with all you all’s help, to gather ideas, foster discussions, and share experiences aimed at providing the PVRC membership with **“Ammunition for Little Pistols”**. One disclaimer please: No politics, religion, or s*x in this column. Unless you can show that it will help my contest performance. Then it’s fair game.

Those of us who are “little guns”, please read on. If you’re a “big gun” this probably won’t help you very much. Since it probably won’t really help us “little guns” much either, you may as well keep reading anyway.

In his email, Dan, K2YWE, raised 8 main subjects that he felt are important to “little guns” or where he felt personal improvement is needed. There’s a lot of meat in Dan’s missive. And lessons for many of us to either learn or apply or both. So, here’s Dan’s comments with some of mine added. I hope you find some inspiration that helps improve your contest scores.

1. Ability to hear second and third tier stations is a key contributor to achieving a big score

Bill: How true. If you can’t hear ‘em you can’t work ‘em. But what’s a little gun to do with an average grade receiver or transceiver? We all can’t run out and buy a FT-1000 or Orion. Please share your experiences and ideas on those affordable things we can do to hear better during contests.

2. Concentrating on early running

Bill. Right. Me too. I used to be able to get up at 4:30 AM and run 6 miles. Not what you meant? Well, it’s a rare contest day that I can get a decent run going much less than sustaining a run with low power and a wire antenna. Can you? How do you do it? What works for you?

3. Splitting time into running when conditions support it and S&P’ing when they do not

Bill. Yep. I get a lot of time in S&P’ing. How about you?

4. Using a multiplier strategy of literally crawling through the bands during his allotted multi-chasing time

Bill. Oh Yes! But there’s probably even more strategy we can use to improve our chances. Operate in an assisted mode or take our chances with our ears? S&P top to bottom? Bottom to top? What think?

5. Not participating in or quickly leaving big pileups early in the contest

Bill. Well, this one takes discipline. Now that’s not easy. How can a dedicated DXer like me possibly pass up a pileup for a entity I need, at least on this band? I only have 291 confirmed. A long ways to go yet. But Dan’s right on target. You can get a number of Qs and perhaps other mults by bypassing the big pile ups. On the other hand, I missed VY1 is a SS for a sweep by taking this approach. Never heard him after the first few hours. What’s your strategy and why?

6. Inability to read a calendar

Bill: Duh!

7. Not developing a propagation insight and only a hint of overall strategy

Bill: See number 4 (I’m getting tired).

8. Falling asleep at the knob during the last S&P searches

Bill: See number 7.

For those of us who have no long term memory (just like my dog, I re-invent history every 10 minutes or so) I have copied Dan’s email at the end of this weak attempt at a readable article – without his permission I might add. So sue me.

And talking about being tired, for those of you who haven’t been lulled into a deep sleep state yet, our goal is to use the above to stimulate thoughts and share ideas which will help each of us “little guns” do better contest after contest. Please

send me your comments, thoughts, ideas, whatever to me at bill@axelrods.org and I'll pull them together into a (hopefully) monthly column. And remember – WPX is coming up. Little guns with cool prefixes get an additional 12 db added to their signal because now you are the “rare one.”

73... *Bill K3WA*

“From: "Dan Zeitlin" <k2ywe@yahoo.com>
To: "PVRC Submissions" <PVRC@mailman.qth.net>
Subject: [PVRC] K2YWE after action ramblings [long]
Date: Monday, February 23, 2004 1:35 PM

FWIW, I was collecting my after action thoughts. Read on only if you are not easily bored. I am certain my "findings" are not either new or new, but may be of interest to a few.

1. I am convinced that the ability to hear second and third tier stations is a key contributor to achieving a big score. In fact, I think it is the ultimate limiting Q-generation factor. Gaining the required hearing capability is more challenging for the big guns than for low power stations like mine. They have to hear 10dB or more better than I do. I am certain that not hearing weaker stations while running cost me significantly. The man-made noise levels I currently suffer at my station exacerbates the problem. I think I can be heard well enough to sustain long runs at reasonable rates in most instances under decent conditions, however I cannot always hear the stations calling me.
2. I concentrated on early running. Making hay while the sun shone, so to speak, since I cannot make the sun shine as the super stations can do. I believe this was a successful strategy for me.
3. I split my time into running when conditions supported it and S&P when they did not. I further split the S&P time into Q generation and Mult chasing activities. I believe this conscious split helped to significantly improve both Qs and Mults.
4. I used a multiplier strategy of literally crawling through the bands during my allotted mult-chasing time, leaving no stone unturned (patience, Grasshopper). I believe this garnered me more than my usual search for pileups alone. In some instances I found lonely Mults without pileups. During the last hour of the contest I found many Mults, both with and without pileups. I finished my last Mult QSO with 12 seconds left on the clock.
5. In most instances, I either did not participate in or quickly left big pileups early in the contest, reasoning that those stations would be available later with less competition. I believe in the main that it worked in my favor, even though a few stations were not to be found later on.
6. I was not prepared because I got the date wrong. I must learn to read a calendar.
7. Because I was unprepared, I had no propagation insight and only a hint of overall strategy. I think it cost me some 10m contacts and multipliers on Saturday morning. I was also insufficiently rested.
8. I found myself falling asleep at the knob during my last S&P searches. I suppose this means I need to better physically prepare or perhaps to get younger somehow. More than ever I appreciate the beauty in being a member of a team. It's kind of like playing tennis doubles as years progress. Working one band with unquestionably limited openings is also an option, I suppose. “

Eastern Shore Activities

By Bob Finger, W9GE

It has been some time since the Eastern Shore group has had a gathering other than at W3PP's place. So, in an effort to get us together please plan to attend a PVRC ES picnic at the home of W9GE and Jan Finger in Easton, MD on 24 April from 2 till 6 PM. Easter Shore PVRC'rs encouraged to attend, all other PVRC members are most welcome.

There will be Brats and Beer and Dogs and Soda along with chips etc. Nothing fancy, just an opportunity for social interaction and maybe some contesting discussions. YL's, XYL's, OM's, harmonics and significant others are most welcome. Please give W9GE a heads up as to how many you will bring with you so there are enough Brats to go around. RSVP to

w9ge@arrl.net by phone on 410 819-8126. Bring a dish to pass if it is convenient.

Directions to W9GE. from North, West or South; rt 50 (Ocean Gateway) in Easton go east on 328 for 1.6 miles. Turn south on Swann Haven Road and go one mile and you come to the "private road" sign and blacktop turns to gravel. House is first one on the left, just past the shack and towers after you get on the gravel. From the East take 404 to Denton, turn west onto 328. Drive 15 miles and prepare to turn south onto Swann Haven as you pass Black Dog Alley. Talk in on the local repeater 147.045 pl 156.7.

Easton Maryland monthly breakfast

Several of the hams in the Easton area have started a monthly Saturday morning get together. Any PVRC, or non PVRC ham is welcome to join us if you are in the area. We meet on the third Saturday of each month at 9:30 AM. Location is the Bagel Bakery on Marlboro, directly behind the Lowes off the Easton Bypass. Contact W9GE at w9ge@arrl.net or on 410 819-8126 if you need more specific directions or othr information.

The Toolbox

By Don Daso, K4ZA

Recently, I spent some time explaining or outlining the varieties of tower available to a potential client—a recent transplant to the Carolinas who wants me to install a tower/beam for him. I was surprised to encounter so much resistance to “guyed tower” from this person, especially when it came to the actual guy anchors, that I thought perhaps a few words on them might be appropriate here.

Many years ago, I switched to A. B. Chance anchors in lieu of the Rohn screw-in anchor. The Rohn GAS604 is 4-feet long with a 6-inch diameter anchor, rated at 2500 pounds of holding power. The Chance #816 (available with thimble loop or “tripleye” knuckle ends) are 66-inches long, with a 1-inch shaft diameter, and an 8-inch diameter screw. Longer, thicker, and with great holding power. (Note: screwing any anchor in “by hand,” may lessen its holding power by 10%. So, having greater potential available makes sense to me.)

I have also had success over the years building and installing elevated anchors, allowing one to mow the lawn or otherwise walk under the guys without incident. I have used well casing (filled with rebar and concrete) pipe and I-beam material (with holes drilled, as well as anchor point welded to it).

And, I have also made an anchor suitable for burial from old car/truck tire rims. They’re often free for the asking (bent rims have no value) from friendly garages. A long anchor rod (available cheaply from junk yards or even my utility company’s surplus yard) can easily be mounted (sometimes using existing holes) to the rim, then concrete poured in and around the rim. The effect is similar to what’s known as a “plate anchor” in the utility business. Typically, crushed rock or packed earth is used with them, but I’ve had good results using concrete.

At this point, it’s probably important to mention soil classes. The ability of an anchor to hold a guy, along with the ease of anchor installation, will vary in different types of soils. Soils are divided into 8 classes, based on moisture content as well as the composition of the soil itself. These classes include:

Class 1. Hard rock, solid.

Class 2. Shale, sandstone, or trap rock, solid in adjacent layers or shattered in subsoil.

Class 3. Hard, dry, hardpan.

Class 4. Crumbly, damp. Soil in this class is mostly clay that’s not moist enough to pack into a ball when squeezed by hand. Particles crumble off.

Class 5. Firm, moist. Soil in this class is mostly clay that *will* form into a firm ball when squeezed by hand. Includes most soils in well-drained areas.

Class 6. Plastic, wet. Soil in this class is also mostly clay, but when squeezed by hand, it will readily assume any shape. Such soil can be found in fairly flat terrain.

Class 7. Includes Type A, or Loose dry. Soil in this class is found in arid regions and is mostly sand and gravel.

Filled-in or built-up areas in dry regions fall into this class, along with Type B, or Loose wet. Soil in this class has the same holding power as Type A, and is high in sand, gravel, or loam content. The holding power of Type B soil decreases during rainy seasons. This class of soil is usually found in poorly drained areas.

Class 8. Swamps and marshes. This class includes moist soils that vary in their classification throughout the year because of changes in moisture content.

When choosing any anchor type, the selection at any guy location should be based primarily upon ease of installation. For example, a screw-type anchor can be installed more easily in loose soils than in firm soils. The equipment used for digging the anchor hole will be determined by the type of anchor to be used. The anchor size and plans will specify, in accordance with soil class, the anchor size to be used at each guy location. Safety, economy, and appearance should obviously be considered when placing anchors or guys. And, whenever practical, use mechanical or hand earth augers to dig the holes for anchors. Vary the depths of setting for the anchors to permit the eye of the anchor rod to project not less than 6 inches nor more than 1 foot above the ground. (I like to protect ANY metal at its entrance/exit point with soils. I've used both vinyl roof coating and auto undercoating equally successfully.) Obviously, such contact points with the ground should be part of your annual inspection.

Let me know what's in your toolbox.

FS5UQ – CONTEST DX-PEDITION TO PIC PARADISE

By Jeff Hartley, N8II

A team of 5 PVRC members — team leader Dave K3LP, Kam N3KS, Clint W3ARS, Steve K4EU, Jeff N8II, and Larry N7DD (non-PVRC) — journeyed to French St. Martin to operate multi-two in the ARRL CW International DX competition. Our host for this visit was Mort Bardfield, W1UQ. Mort is the owner of the FS5UQ call sign and operating location.

There were several hands-on working meetings in Maryland before we left to check out rigs, band-pass filters, multi-radio switches, radio filters and load Writelog into PC's.



Left to right: K4EU, N3KS, K3LP, N7DD Front: N8II, W3ARS

Prior to this journey to the island, David (K3LP) and Clint (W3ARS) had traveled to the island to install a fifty foot tower and Tennadyne log-periodic antenna in November 2003. Also, dipoles were fabricated and installed for 40 and 80 meters plus a sloper for 80 and 160 meters. David had visited the island also in June and August 2003 for planning purposes.

On Wednesday before the test, Dave brought his two FT-1000MP's and Alpha 91-B, and about two suitcases full of antennas, coax, hardware and tools to the island with me riding in tow. Larry had also brought a loaner IC-756PROII for use during the contest. We were all on the island by 7:45PM, Clint and Larry having arrived the day before. I thought to myself as I was trying to fall asleep, "We really only have 1 day before the contest day to put up 3 bands worth of vertical antennas and set-up the stations. This is going to be hectic!"

Since the antennas installed in November already worked, Dave wanted to try to add some special antennas. Early in the planning stages, it was a two element wire beam for both 40 and 80 meters. The idea was since the dipoles worked great, an additional element would have been better. After much discussion with guys on 80 meters involved with contesting, Dave decide to purchase phased vertical boxes for both 40 and 80 meters. The 40 and 80 meter beams plans were put aside and the goal on the island was to install the phased verticals. David said, "After all, anyone can install a dipole – done that – so let's try something different".

We were staying on the Dutch side on the west tip of the island with some hope of maybe operating from our hotel, but we never had time to consider doing that. After breakfast, we headed up to the operating site on the French side, Pic Paradise, the highest point on the island at an elevation of about 1400 ft. The trip featured a drive through Marigot, the French

capital with narrow streets, perpetual daytime traffic jams, and “in your face” French drivers. We once narrowly avoided a crash (it would have been no accident!) when a driver backed across our lane without warning into a parking space on his opposite side. The “road” to the peak went from concrete with deep chasms at the bottom, to a literal cow path (the cows loved to use it and scare Larry who stayed on the mountain at night) at the top with a pair of concrete tire tracks on the steepest stretch. Four-wheel drive was necessary to negotiate it safely. Larry got stuck once; Kam towed him up the hill.

The station was in a large concrete building with a basement. It came equipped with a TS-440S and a very old anemic Alpha 78 putting out about 400 W (flat tubes). The shack space was more than adequate for a M-2. On top of the building was a tripod tower with a Force-12 C3S (with rotator missing and broken coax) which cost us a lot of time and effort to fix. On the east side was a 50 ft tower with an 8 el. Tennadyne log-periodic for 14-28 MHz that was installed during a prior trip. On the west side, about 100 ft from the LP, was a 90-100 ft commercial style tower which was to be used for wires. Clint ran a catenary line between the 2 towers and put up an outrigger pipe to support the top of our 160M inverted-L. The antenna was installed pretty easily after that and initial SWR looked decent. Then we added a 4th radial and elevated the radials about 7-10 ft and it went haywire which we discovered after dark that night. The next day, the high SWR issue was resolved by placing the 4 radials back on the ground. I helped build the 40 and 80 M verticals along with Steve and run cables and wire antenna control boxes. Kam worked on the networking and internet connections. Kam and Steve set-up the Writelog software being familiar with it. Dave worked on installing and building the antennas and keeping us on track to get it all done. By dark, we had 40 and 80 M verticals built, but not up and a pretty dead 160M inverted L compared to the 160 meter inverted-vee already up on the tall tower. The SWR was decent, but the angle was just wrong for stateside.

On contest day, we put up ground mounted verticals, a 2 el. for 40M and single 80M. The verticals for all 3 bands turned out to work very poorly compared to the respective dipoles installed by Dave (K3LP) and Clint (W3ARS) in November. My theory is there was very poor ground conductivity and without a massive radial system (the 80M had 6 radials), they just wouldn't work. When Clint tried to drive some rebar into the ground, it went about 3-4 inches before hitting rock! In retrospect, we should have elevated them as much as possible and 40 as a single vertical and 80 would probably have worked. Frustration was clouding clear thinking at this point. Dave decided to put up an 80M inv-vee at about 70 ft.

The hour of doom, 0000Z quickly rolled around and Dave and Kam left us to have our “fun” while they readjusted their attitude and got some needed rest. Larry, Steve, and I kept the stations running until 5:30 AM Saturday morning. Larry started on 80. Due to no CQ answers on 20 right before the start, I chose 40M, which proved to be rough with about 4/5 the 80M rate. First hour total rate was 193 and the 2nd was 216. After the first hour, I switched to 20M with no amplifier because months ago 20 had taken out internet service to the entire island (the peak is a relay site). The 20M rate was not what we had hoped for, 100/hr and almost no propagation to the Pacific NW and Rocky Mountain areas; CA and AZ were loud. This pattern repeated itself countless times on almost all bands 40M and up during the contest. We were very lucky to catch almost all the mults in those areas! Around 02Z, I returned to 40 and the rate was more respectable this time; the states were starting to look our way. Steve took over 40 at about 0245Z and we switched off periodically thru the night with Larry switching between 80 and 160. Larry threatened to quit around midnight, but he was having such good runs that he stuck it out until around 0845Z. By dawn, we had about 40 Q's shy of the all time QSO record on 160 and maybe 600 Q's on 80 with over 900 on 40. Dave and Kam returned and discovered that things looked promising. Dave was very pleasantly surprised with our totals. He had established goals for each hour of the test and I think we were even or a bit ahead at this point. Clint drove Steve and me back the long “roller coaster” ride to the hotel for some much-needed rest; his kind support kept us going.

Throughout the test we switched off at about 7 hour intervals between Dave/Kam and Jeff/Steve with Larry working mostly nights. Despite using Dunestar bandpass filters, Dave and Kam discovered the interference between 40 and 20 was intolerable and those were the only bands open! They lost some ground trying to solve the problem and ended up running very low power on 40. Quite often, we would have to reduce our power substantially on the lower band to keep the interference tolerable. Grounding helped a bit. It's interesting to note that both days and especially Sunday the rate suffered in the 1100-1400 hours while the stateside throng worked Europe, then the rate improved substantially to over 200/hr in the 15Z hour and later. The WP3R single-op log showed exactly the same phenomenon! Ten meters proved to be open well enough to stay there most all day and provided some excellent rates as did 15 in the late AM, afternoon, and until around 2330Z. Fifteen meters proved to be the biggest Q total band. Our best total 2 Tx rate was 298 in the 19Z hour Saturday. Steve had the “mother of all runs” on 20M from around 2230-0200Z and had the problem of too many callers which kept the rates in the 160/hr range on that band. I took over and didn't leave 20 until about 0340Z; it was still wide open. At 04Z we switched crews and were pretty ecstatic about the numbers as we were over 300 Q's above our goal! The rates after midnight Sunday were disappointing, many sub-100 Q's. Steve and I returned at 1230Z to find we had slipped below the goal rate. Things were terribly slow until 15Z, even on ten and we resorted to the “pse QSY 28010” tactic to try and keep

up the rate as much as possible. All afternoon we kept up goal rates or exceeded them slightly. Ten finally opened a bit to the Rocky Mountains enabling us to fill in missing mults. Around 21Z, 10 was getting slow, and I started pestering Dave to move from 10 to 20 which proved to be a good move. He worked an unexpected higher than normal end of contest rate right up to the end despite some intentional QRM.

Monday we all took a turn at running a few Eu stations, most opting for SSB after all that CW. Clint showed Steve and me around the island and its beautiful vistas. We shopped in downtown Phillipsburg briefly and returned to the hill for a group picture and had a nice dinner on the French waterfront.

The trip was not quite as smooth running as we had hoped, but the results were a new NA record if the score holds up after log checking. PJ2T has a higher claimed score (about 50 more QSO's and 1 less multiplier), but their original report contained many non-contest and practice Q's. The final outcome for this year's 1st Place World, Multi-Two category will be in the hands of the ARRL Committee log checkers. If we get 1st Place World, this will be the second year in a row for Dave's teams (last year, VP5LP). Here's the box score:

Band	QSOs	Multipliers	Total Score	8,192,268
160	578	56	7847 QSOs	348 Mults
80	914	58		
40	1456	57		
20	1501	59		
15	1872	59		
10	1526	59		

This Just In...

Congratulations to **KI3O**, who says he's "making the transition from DXer to contester," and operates virtually every contest using an FT-897 at 100 watts and a 12-foot Outbacker antenna on the roof deck of his condo. In the recent ARRL Phone contest, Bob had 418 QSOs and 202 band countries, scoring 253,308 points for PVRC.

Bob just got his first certificate, for operating achievement in last year's IARU HF Championship, and is living proof that there's a lot of contesting fun to be enjoyed out there, even under very restrictive conditions, if you give it a try.

5M Contest Results By Bob Dannals, W2GG

ARRL RTTY ROUNDUP

Call	QSOs	States	DX	Total	NI4S	21	13	##	273
Single Op High Power					Multi-One				
K3MM	1100	58	59	128,700	W4RM	1336	57	66	164,328
W2YE	872	55	51	92,432	K3KO	640	112	##	71,680
W3BP	896	52	51	92,288	W4NF	523	52	42	49,162
N4CW	726	57	47	75,505					
N3NT	510	96	##	48,960	Total logs:			15	
4U1WB	429	55	28	35,607	Score:		851,793		
K4MA	260	40	38	20,280					

Single Op Low Power

K3SV	566	82	##	46,412
N3WZR	226	49	11	13,560
K3DI	165	42	18	9,900
K4RT	82	31	2	2,706

Note: Multi-one not listed below were SO Assisted

Multi-op operators [non-PVRCin()]:
W4RM: W4RM WA4TK K5OF W4DC W4DAV (N8CIA KG4HTL)

ARRL January VHF

Call	Power	Bands	QSOs	Mults	Total
Single Operator					
N3HBX	H	#	512	99	63,261
AI3Z	L	#	###	##	24,516
W3IKE	L	6	175	56	14,840
K3ZO	H	2	313	46	14,398
N4MM	L	2	185	34	6,290
W3ARS	L	5	151	33	6,270
K4FTO	L	4	125	31	4,805
N3VOP	L	4	126	23	3,519
K2PLF	L	2	107	26	3,042
K3DSP	L	2	75	24	1,800
K3YDX	L	3	87	15	1,575
N3UM	L	2	86	18	1,548
W6AXX	#	1	84	17	1,428
W2YE	H	1	87	12	1,044
K3KO	L	#	30	13	390
W3CB	L	1	35	11	385
N3FNE	L	1	34	8	272
NX9T	L	2	21	11	231
W3LL	L	1	19	6	114
N4JED	L	1	9	3	27
WM3T	L	1	5	5	25

Rover

W3IY	#	10	686	105	171,255
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Multi-Op

W3SO	H	4	948	176	218,064
Logs:	23				
Club Score:	539,099				

Operators (non-PVRC in parentheses):

W3IY: W3IY (ON4IY)
 W3SO: KD3SA K3RUQ W3BTX W3PAW W3TEF
 W3YOZ WR3Z K4VV W9NET

CQWW 160 CW

Call	QSOs	States	DX	Score
Single Op High Power:				
W4MYA	1336	56	57	576,413
W4ZV	1245	55	61	555,176
K4ZW	1141	57	51	414,072
KD4D	1113	55	47	409,020
K4JA	999	57	49	382,342
N4XD	823	52	48	270,000
N3UM	691	52	38	179,190
N8II	763	54	33	178,785
WK4Y	782	51	31	170,560
K2PLF	542	49	35	152,544
K3JT	559	50	29	119,448
K8OQL	656	53	21	116,106

W4NF	412	49	20	95,814
K3ZO	329	46	31	82,698
K3SV	334	45	31	80,028
N3AM	406	50	21	77,745
N4MM	269	46	28	64,306
N4YDU	250	41	18	42,303
WF3J	###	##	##	39,450
W3DQ	320	47	7	39,204
W2YE	204	41	14	28,600
N3FX	194	41	7	22,944
NX9T	160	42	5	17,484

Single Op Low Power:

K1HTV	774	55	35	189,360
W3BP	494	52	9	69,418
W0YR	543	48	8	69,328
K3SWZ	325	48	18	54,648
K2YWE	236	40	5	23,625
W6NRJ	112	39	12	16,014
W4YE	165	42	##	15,372
KI3O	163	39	##	13,884
WK3H	163	33	4	13,468
W2DZO	120	35	2	9,546
K4EU	113	27	0	6,669
WB4DNL	85	26	#	5,174
K4QPL	50	27	1	3,108
N4JED	60	19	0	2,451

Multi-Op (single op plus packet unless listed below):

KT3Y	1092	58	59	475,580
NR4M	1160	56	58	453,720
NY4A	1075	55	53	376,596
W0UCE	1023	55	42	288,284
K3DI	652	54	37	175,175
N4RV	346	53	43	138,720
W3HVQ	411	48	40	118,360
K4HA	653	55	36	86,223
K3KO	320	77	##	71,440
W3EKT	233	46	34	60,320
W3UL	300	58	##	41,122
WB4MSG	129	42	##	12,642
WM3T	107	39	##	10,023
4U1WB	26	9	#	468

Logs: 51

Club Score: 6,914,970

Operators (non-PVRC in parentheses):

4U1WB: AJ3M
 K4HA: operated with W2XL at W2XL (above score is PVRC part)
 K4JA: K4MA
 KD4D at W3LPL
 KT3Y: KT3Y K3EST
 NR4M: NR4M K4EU K1SE K4GMH K7SV
 NY4A: WJ9B N4AF at N4AF
 W0UCE: W0UCE N4CW

Around the Club

Meeting Minutes from the Regions

Central Region March 8, Temple Hills, MD

Those interested attended dinner beforehand at Topolino's at 6pm, and the meeting was called to order at the Church of the Nativity at 7:45pm by N3OC. Members attending were: N3OC, WR3L, KE3Q, W3YOZ, K4VV, W3TOM, K3FT, K3PN, KD4D, K3ZO, KI3O and W3DQ. K4VV gave a brief President's report and spoke about the efforts to reorganize the leadership structure within PVRC, and to update the bylaws to be consistent with that. There are several inter-related issues, including membership qualifications and possible different categories of membership, who has the authority to make by-law changes and elect officers, and other related issues. N4ZR is currently assembling comments and suggestions from the trustees and club officers on these topics. WR3L gave a brief treasurer's report, and said he has been working with new advertisers in the newsletter which is generating some additional income. The paper newsletter circulation continues to decrease as more members receive it electronically, which helps to reduce our expenses.

There was one new member to vote in, Brian Wruble W3BW. Brian was not in attendance, but has met his two meeting requirement previously. He is an extra class licensee and is sponsored by N3JT. He was voted in without discussion, welcome, Brian, to PVRC! The meeting program was a presentation by N3OC on legislative affairs affecting ham radio and PVRC. [See the lead article in this month's Newsletter—ed.] The meeting was adjourned at 10pm.

Historic NC Chapter Meeting March 10, Golden Corral, Burlington, NC

Members Present: Pete AD4L, Guy K2AV, Jim K4QPL, Melissa KD4VED, Dan KG4ECI, Robert KG4NEP (with Alex), John N0KTY, Bert N4CW, Tom N4IOZ, Jeff NX9T, Jack W0UCE, Henry W2DZO, Will WJ9B, Don WS4NC, Jim WW4M First Meeting: Brad K0BHC Regrets: Jack K4VV, Wes K4WES

Chapter Business Dinner was scheduled for 7:00 pm and Guy K2AV opened the meeting at 7:45. This was the first joint meeting of PVRCers from the Triangle (Raleigh/ Durham/ Chapel Hill) and Triad (Greensboro/ High Point/ Winston-Salem) areas. We plan to hold future joint meetings biannually near the equinoxes (March and September). Hopefully the September meeting will be a bigger affair and include members from other regions as well as formal speakers.

The first order of business was a proposal from all members present to split the North Carolina chapter into North Carolina/East and North Carolina/West chapters, with Henry W2DZO the chairman and Robert KG4NEP the secretary for the West chapter and the East chapter retaining K2AV and WW4M as chairman and secretary. The proposal was approved by unanimous acclamation. K2AV applauded the NC/West members for the moxie and mojo they have displayed in contesting and encouraging operators to get active in contesting. The NC/West chapter comes into being with about 10 members, not including Will WJ9B who lives in the Triad but has been making the long commute to meetings in the Triangle all of these years. Tom N4IOZ remarked that it is well known that whenever 3 hams gather they usually manage to split into 2 clubs, however this was the first time he'd ever seen a split occur at a group's first gathering, not to mention that it was scheduled as our first item on our agenda.

Both chapters will continue to share the <http://pvrcnc.org> website and the pvrcnc@mailman.qth.net email listserv. Since a number of NC/East members recently chipped in to cover renewal of the web hosting and domain name, W2DZO suggested that NC/West members who wanted to contribute could help with expenses for RARSfest tables. Since the web expenses come due each fall we can pass the hat at the joint September meetings. Members of both chapters will also be able to request the use of the PVRC/NC callsign NY4A (trustee N4AF). Henry W2DZO provided a short history of the core group of the NC/West contesters. They had been members of the Forsythe ARC (W4NC) and formed their own Courteous Operators Club (W4WS). They operated CQWW M/S Field Day-style (don't all contesters operate from the field?), not aware they could run a mult station without becoming a M/M. Next they contested from W4NC at the Red Cross station, suffering through the QRN generated by the blood coolers. Then they started operating from W2DZO's house, incorporating the swing set into the antenna farm and appropriating the clothes dryer's 220 VAC line for the amplifier (suffering a 30V drop along the trip to the amp). They currently are operating M/S from KG4NEP's champagne station on a beer budget, having recently erected 5 towers in 5 weeks. They enjoy having a good time while being competitive and look forward to being recognized by their new PVRC affiliation by other contesters at this year's Dayton Hamfest. Henry unveiled (literally) the sacred W4WS scepter so the NC/East members could gaze upon it. The scepter, which is actually a Bud Light Draft handle, was the result of many years of pizza and cold beer at the W4WS favorite haunt, Princes on the Park. "Several of us would go there after Forsyth ARC meetings to relax and chat about contesting. Five years later the restaurant closed and the fixtures went to auction. Don WS4NC went to the auction and convinced the owner, Mike Prince, to give us the tap handle since we 'probably paid for it about 200 times...!' The scepter hangs at our W4WS station and is uncovered during operating events as a reminder of the good times at Prince's, the birthplace of our

group. We "tap" new members of our operating group during CQWW."

Next we recognized Brad K0BHC, who was attending his first PVRC meeting. Brad is with the 82nd Airborne out of Fayetteville and is using his father's old callsign.

BPL report: Jeff NX9T reported on his field investigations into interference from BPL trials in Wake County. He recommended that everyone listen to the wavfile samples on the internet so they'll recognize the noise when they hear it on the air. Everything he observed was on the 12m and 10m bands. A story about Wake County BPL and Chairman Powell's visit appeared on the ARRL website at <http://www.arrl.org/news/stories/2004/03/09/1/?nc=1>. Since Will AA4NC works for Progress Energy, we wondered at the conflicted position in which he must be finding himself.

RARSfest: Jim has reserved 3 tables with an AC hookup (1 table for Pete AD4L and 1/2 table for Henry K4TMC). Pete will bring a computer for the ever-popular RUFZ speed CW recognition contest. We will hold an informal meeting at 11AM. Brad K0BHC gave a plug for the CFARS fest in Fayetteville in August. Member News K2AV was pleased to announce that the PVRC ops at NY4A won the M/M division of WPX CW 2003. The station has experienced some damage in the recent wind storms but nothing that can't be fixed. The computer design of the 8-el 20m wire beam within the 5-el 40m quad may finally have been tweaked a few too many times, so it will be retired in favor of a shorter design. Guy also reported that the pulleys in the wire antenna system will be replaced with more reliable stainless boat hardware.

WJ9B did the ARRL DX contest at NY4A, and also operated in the CQWW and 160 contests. He hopes to be back to NY4A for WPX. N4CW, whose right arm was in a sling following surgery on his rotator cuff, operated one-handed in the ARRL phone contest and at one point was managing 3Qs per minute. So far in 2004 he's only blown up one laptop (bad onboard memory). He operated NAQP CW at W0UCE (using Jack's name but Bert's call) and also operated the 160 contest from Jack's. W2DZO ran NAQP CW, multi on SSB, both flavors of the 160 contest, and operated the bonus station during the NC QSO Party (hosted by the Forsythe ARC). He had a heartbreaking story of operating multi for 39 hours and shorthanded in the ARRL DX Phone contest, only to experience dramatic antenna hardware failures at 5AM Sunday morning. WS4NC has recently begun using an FT-817 (QRP) and bug into a CB whip antenna without a tuner in his truck. N4IOZ operated mobile in the NC QSO Party. KD4VED was on the air for the NC QSO Party during Sunday's storm. N0KTY operated the NC QSO Party with his antenna physically located directly above the point where four counties came together. He also contributed to the history of the NC/West group by relating a Field Day story in which they brought a 1947 weather balloon out of storage to lift a 160m diamond antenna (with the bottom at 100' above ground), having Rural Hall, NC declared a no-fly zone for the day. Unfortunately the balloon ballooned beyond its aging capabilities and everything came silently tumbling down. KG4ECI is operating 10m only at home but otherwise operates with W4WS. He gave credit to the contesting bug for inspiring him to upgrade to Amateur Extra. He enjoys working on the W4WS antenna farm from ground level.

W0UCE has been gone for four years, mostly in Japan. He, Bert and Bob operated in the ARRL and CQ contests. He also operated for 9 hours and 275 Qs in the NC QSO Party but lost his log while converting it to Cabrillo format. KG4NEP also upgraded to Extra as a result of contesting. He hosts the W4WS multi-multi station at his home. He really enjoys operating with the group and was happy to earn the title of 4-land Rookie of the Year. K0BHC was originally licensed in junior high but has only recently gotten back into ham radio (he didn't operate while in Afghanistan). He prefers CW and is looking forward to building up his station. K4QPL operated with the 6-op crew at NY4A during ARRL DX CW and was tickled to earn 5BDXCC in one weekend. He has worked other recent contests (prefers CW) and got on the air for the NC QSO Party. Work on his new shack/garage is nearly complete. WW4M reported that the club at NC State was recently informed by the College of Engineering that it would not lose its space in Daniels Hall when the Electrical Engineering department move to another part of campus (whew!).

AD4L recognized the work of K2AV and K4VV to move the circle and patience and enthusiasm of W2DZO and the other members in Winston-Salem. Pete is scaling back his ham activities in favor of time with the family and will send a message to the list of the gear he's selling in advance of RARSfest. He's looking forward to getting his antennas back up and pointed at the BPL test site. NX9T also has to work to squeeze in ham radio around family activities. He likes to run while on phone but operates S&P on CW. Jeff manages to get on for most contests. We ended the meeting around 9:45 and closed Golden Corral.

Rappahannock Chapter March 13

The meeting held at the new NR4M QTH was called to order by Steve Bookout NR4M on 13 Mar 2004. In attendance were K4GM, K4EC, K4FJ, K4GMH, W4IM, NW3Z WA4JUK, K1SE, NR4M, K3NC, W0QDM, K4ZW, KA4RRU, K5OF, WK3W and K7SV. This was the second meeting for K4GM and W4IM. Both were voted into the organization.

The first order of business was a decision as to frequency and scheduling of meetings. The group agreed that holding regularly scheduled meetings would probably be ineffective. It was also decided that about four meetings a year would meet our needs. Mike K4GMH will work to schedule meetings around the various contest activities throughout the year.

Frank K4EC briefed the group on his efforts to expand chapter communication capabilities via the Internet. A Rappack web site is being constructed using KA9FOX's services. Chapter group email with a calendar has also been established through YAHOO.

With decent weather approaching, we discussed necessary efforts to keep construction at the new NR4M site on track. The 160 ft 20 meter tower is in place and the four yagis almost completed. A five foot piece of tower needs to be put in place at the top and the rotator has to be mounted at the 110 foot level. Design work for the 40 meters yagis has been completed, but element materials are not yet on hand. NR4M and NW3Z will work out design to expand the bandwidth of the existing 5 el 15 meter yagis. We discussed putting the previously used 40 meter Mosley 3 el and HyGain 205CA yagis in fixed directions to cover South America etc. K4GMH and NR4M are building a number of antenna stack matching boxes for Mike's replacement antenna system (following Isabel's dismantling) as well as those at NR4M. Schematics and info on silk screening available. The problem with AB105 tower stacking crooked was discussed. The prevailing theory at the moment relates to regalvanizing of the tower. Instead of drilling out the zinc sludge in the holes, a taper punch was used to enlarge the holes enough to allow the bolts to pass through.

K7SV described CQ 160 CW operation from the Goat Farm (NR4M). A 160 meter ground plane was suspended from the 20 meter tower. A 2 wavelength beverage was put up for Europe, but performance left something to be desired. It is thought that a poor ground connection at the termination was the problem. Some excellent signals were heard/worked from Europe, but propagation seemed a bit spotty. Results of the first operation from the new QTH were very encouraging. The meeting adjourned around noon at which time a number of pizzas disappeared!

Eastern Shore March 5

In as much as we hold regional meetings at W3PP before each of the major DX Contests, and the only real meeting topic is going over station operation and discussing operating strategy, I have been remiss in submitting minutes of these meetings for some time. On 5 March, the meeting had a bit more substance. For starters, we welcomed and voted in K3TKJ, Al Waller to the club. Al is a well known VHF contester to many PVRCers, and also operates the QSL.NET ISP service that is also used by PVRC. This was Al's second regular meeting, and I am sure that he will be a productive addition to the club, particularly submitting VHF scores from his W3DOG club station.

Bob, W9GE also discussed a planned PVRC picnic to assemble ES operators and help promote PVRC here on the shore. It is still in the planning stages, will be held at his new location in Easton, Md., probably on 24 April. I will be sure to get more info on this event. Those attending the meeting were W3PP, N3KW, NX3A, N3ME, W9GE, KW3Z, K3TKJ, and non-members N3WDL, WV8RS, KD5FWV, N3YE, and WA3GGM.

CVCC Chapter, March 9

The regular monthly meeting of the CVCC at Henrico Doctors' Hospital, Parham Road Campus, was called to order at 7:03 PM by President Roy Davis, WK4Y. Nineteen members and guests were present. Members and guests introduced themselves. Roy began the meeting with a list of accomplishments by members.

Bob, W4DR, won the DeSoto Cup for the fourth consecutive time. K4JA #1 USA in the ARRL DX CW M/2 category with 12.8 mil points. W4MYA #6 USA in the ARRL DX CW SOAB category. ARRL 160M W4MYA -.32 W3BP -.18 CQ 160 CW SOHP - W4MYA -.58M K4JA -.38M (K4MA) WK4Y -.17M

Mike Baker, N4LSP, presented the program entitled "Vertical Antennas: Fact, Fiction and Opinion". Mike recounted some of his experiences with verticals including his first Hustler where he made numerous treks up and down stairs trying to tune for each band. Mike showed details of a vertical that works well for him, including the grounding, line isolator, and I. C. E. lightning arrester /surge protector. He discussed the use of radials, and talked about the fresnel region and Brewster angle. He favors a vertical antenna because it is more efficient in capturing a larger percentage of incoming signals compared to a yagi. He showed graphs and showing that verticals perform well with signals arriving at low angles. Much of the background information was gleaned from W4RNL's web site, <http://www.cebik.com/> and from 6Y2A's web site, <http://pages.prodigy.net/k2kw/story.html>.

Bob, NK4H, reported the treasury balance for the end of 2003. He has collected \$180 in dues and received a \$75 contribution from Bill, K4WMA, to pay for the domain name registration for the next 5 years. Thank you, Bill.

Dennis, N4DEN, reported that we still need to replace a radio for the packet cluster. He has removed Buckmaster because it was over 6 months old and asked if we used it enough to warrant the cost of keeping it.

Bob, W4DR, announced that Val Reinford inquired about volunteers for the Special Olympics Summer Games. These will be held June 11 – 12 at the University of Richmond, plus several off-site venues. Amateur radio volunteers are needed to provide communication between event staff and venues. If you can help work a shift at the event call Val Reinford at 346-5544 ext. 25 or send an email to vreinford@specialolympicsva.org.

We need to send the contribution to QSL.net that was approved in January. Ralph, N4EHJ, has obtained permission from MRA for us to hold a weekly on-air discussion about contesting. This would be an informal net. We will need individuals with expertise in contesting to act as net control and everyone is encouraged to participate.

Nominations for officers for the coming year:

President – Ed Moore, NW4V

Secretary – Marie Long, K4KML

Treasurer – Bob Ladd, NK4H

Election of officers will be held at the April meeting.

Tom is giving up the newsletter and we need a new editor to take over in May. If anyone is willing to take over as editor, notify Roy, WK4Y. Otherwise, Marie, K4KML, will compile columns and prepare for email distribution or posting on the web site. Bob, W4DR, agreed to take over the DX column. Send him your DX wish list and accomplishments.

We are also in need of a programs committee.

Ralph, N4EHJ, announced that there will be an ARES training session on April 3rd at Martha Jefferson Hospital in Charlottesville. In order to attend you must register. The site is <http://www.va-ares.org/>.

The meeting adjourned at 9:00 PM.

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PVRC REFERENCE PAGE Please send corrections to the editor. April 2004

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PVRC Reflector administered by N4AF <<http://mailman.qth.net/mailman/listinfo/pvrc>>, postings to <pvrc@mailman.qth.net> (Members only, if your call sign is not part of your email address, send an email to n4af@qsl.net to subscribe.)

PVRC Dues PVRC has no annual dues. Donations are gratefully accepted by the Treasurer, Dave Baugher WR3L, 615 Rockaway Beach Ave., Baltimore MD 21221. Please make your checks payable to PVRC.

Autocall Column Editor is K3DI 410-757-6706

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Most of the system is sponsored by the Potomac Valley DX Spotting Network. Nodes with * are independently funded by each SYSOP,. The W4ML node is funded by CVCC.

PVRC Meetings

CENTRAL: The Central Meeting is always the second Monday (except June, July, and August) at 7:30 pm. The central meeting generally alternates between MD and VA locations. A pre-meeting dinner is usually held between 5:00 and 6:30 pm. Check via 147.000- repeater. VA LOCATION: The Patrick Henry (Public) Library, Route 123, Vienna, VA. MD LOCATION: Church of the Nativity (Episcopal), Route 5, Temple Hills, MD.

Pre-MD meeting dinner at Topoleno's Restaurant about 6:00 or 6:30 pm.

NORTHWEST: Chair: Bud Governale, W3LL, 410-666-9189. W3LL@arrl.net. Meets monthly the 3rd Tuesday. Informal dinner about 6pm; meeting at 7pm at the City Buffet, 1306 W Partick St, Frederick, MD 301-360-9666. Rear of shopping center, behind Mountain View Diner.

NORTH CAROLINA -- EAST: Chair: Guy Olinger, K2AV, k2av@contesting.com; Sec: Jim Price WW4M. POC's are K2AV and WW4M (h:919-362-4635, w:919-460-2991). PVRC/NC meets at 6 pm the first Thurs of each month, plus an additional meeting in April at the Raleigh Hamfest. For details see <http://pvrcnc.org>

NORTH CAROLINA -- WEST (TRIAD): Meets the 4th Monday of the month at 7:00 PM at Cobalt's Elemental Eats and Drinks on Deacon Blvd. in Winston Salem. Ragchew at 6:30. Directions are available upon request. The chairman for the new PVRC/NC West chapter is Henry Heidtmann W2DZO, henry@summitschool.com and the secretary is Robert Whitaker KG4NEP, kg4nep@yahoo.com.

TIDEWATER COLONY OF PVRC: This group now meets in conjunction with the Virginia DX Century Club at Ryan's Steak House, which is on Battlefield Blvd in Chesapeake, at the Battlefield Blvd South (VA 168) exit off I-64. The meeting is still the third Tuesday of every month. We gather for dinner around 1815-1830, with the meeting around 1915-1930. Contact W4ZYT at 757-457- 5181 or w4zyt@exis.net for additional info.

SOUTHWEST VA: Coordinator: David Jones, N4JED, Vinton, VA 540-890-2034, N4JED@AOL.COM. Meetings begin at 6 pm at the Roanoker Restaurant, Roanoke, Virginia in a private room (ask at the desk if you have not joined us before).

BWI: Weekly breakfast Wed at 7:00 AM at Basil's Deli Port on Elkrdige Landing Rd 1/4 mile South of Winterson Road 410-850-4333. Director: Ike Lawton, W3IKE, 410-263-2830. Sec: Howard Leake, W6AXX, 410-465-7008, w6axx1@starpower.net

OVER-THE-HILL LUNCH BUNCH (VA DC MD): Meetings are held monthly at three locations: Falls Church VA (Parkview Marriot), Oxon Hill MD, and Beltsville MD. Meetings are announced by E-mail or by telephone. All members and non-members interested in membership are welcome. For information contact Ben Shaver, AA4XU, 703-534-4740 or Bill Leavitt, W3AZ, 301-292-5797.

PENNSYLVANIA: Steve Cutshall, K3TZV, k3tzv@paonline.com, 717-763-0462.

RAPPAHANNOCK: Steve Bookout, NR4M (ex-NJ4F) NJ4F@erols.com. Also, Larry Schimelpfenig, K7SV, k7sv@va.prestige.net

OCOQUAN: Jack O'Mara W4NF, H:703-791-3302 W:703-739-7636 w4nf@comcast.net and Cliff Deel W4CE, w4ce@aol.com 703-491-0841

CENTRAL VA: Pres: Roy Davis, WK4Y rdd2@verizon.net (804-741-9315). Sec: K4KML Treas: W4NM Meetings are held on the second Tuesday of the month at 7:00 PM at the Henrico Doctor's Hospital, 7700 Paraham Rd., Richmond, VA. To the right of the main entrance is a second entrance. Go through that door, turn left through that door and the cafeteria is the first room on the right. There will be some who meet at Nick's Roman Terrace, Westlands Shop-

ping Center, West Broad Street starting at 5:50 PM for dinner before the meeting. Talk-in available on 145.430
SOUTHERN MD: Chair: Barry Shapiro, WR3Z. H:301-862-2466 barry.shapiro@navy.mil Meetings held at the home of N1WR.
EASTERN-SHORE (DEL-MAR-VA): Dallas Carter, W3PP 302-875-0550 ludal@dmv.com
SHENANDOAH: Bill Hinkle KV3R kb3aug@juno.com 304-567-3138
CARROLL COUNTY: Jim Nitzberg, WX3B.410-374-9233 nitz@selectsa.com
LAUREL: Pud Reaver W3YD preaver@earthlink.net Laurel Region meets concurrently with the Laurel Amateur Radio club at the first LARC meeting of each quarter.
NORTHEAST: WR3L Dave Baugher 410-DX1-WR3L dave@wr3l.net
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