Potomac Valley Radio Club Newsletter

October 2003

Visit us on the web at www.pvrc.org and www.pvrcnc.org

PVRC welcomes Alex, KE4BUS, Dave, W4DAV, and Bob, K4RG, elected to membership at the July meeting of the Occoquan Valley chapter.

The next 5M events are the CQ Worldwide Phone DX Contest, 0000Z, Oct 25 - 2400Z, Oct 26, and the ARRL CW Sweepstakes, 2100Z, Nov 1 - 0300Z, Nov 3

PVRC regrets the passing of "Bill" McGeehan, K3HCE, and Jim Murray, W4TKR

Editor's Note

Except for a few human failings (notably, my error in not mailing to one group of addressees until mid-month), the first electronic distribution seems to have gone reasonably well. It was predictable that a few e-mail addresses out of the 580-odd would turn out to be erroneous, so if you know anyone who was expecting an e-mail newsletter and didn't get one, have them contact me. My e-mail address is n4zr@contesting.com.

I'm still looking for contributors. Always will be, I expect. If you have something to say that is germane to amateur radio contesting, don't be shy about sending it to me. I'll help you with technical issues like illustrations and formatting so that it'll look great. Have a favorite operating trick you'd like to share? A piece of software that you've found useful? An antenna design that works well for you? Tell people about it!!!!

From the President
by Jack Hammett, K4VV

The shift of the circle was briefed and discussed in both the Central meeting at Temple Hills on 9/8/03 and at the NW meeting in Frederick on 9/16/03. The change in the circle was approved in both meetings, which together compose the "original Central meeting" empowered for decisions in the current Bylaws. So the action is done. We do need to relook our Bylaws for both decision and membership requirements to modernize and fit our current distributed structure.

Thanks to the Circle Committee for this important action-KE3Q, Rich, K2AV, Guy and WX3B, Jim, supported by N3OC, Brian, and K4VV, Jack. The present location of the circle center is near Louisa, Virginia. The committee recommended changing the center to a point 5 miles WSW of the junction of US 64 and Virginia Route 15; this junction is about 15 miles east of Charlottesville and roughly 11 miles west of Louisa. Moving the center location about 16 miles WSW of Louisa will allow a 17 member active contest team in Winston-Salem and High Point, NC to be included in the PVRC circle. The committee has found no impact on PVRC contesters who live in the circle now.

The impact of the shift is to include a band of dense population around Winston-Salem, NC to grow our contesting membership into another major community. The shift pulls the circle tight along the Maryland Coastline, minimizing "ocean coverage," and touches Charleston, WV to encourage membership.

Many of our members have had major storm damage in September, giving us a handicap and some necessary rebuilding as we go into the primary contest season. It is remarkable how neighbors are helping one another in these difficult times.

It is a tribute to our members and to the legacy in PVRC that we help one another with the challenging tower and antenna projects that keep us competitive.

As we move into this new contesting season, I would ask each of you to encourage your PVRC friends and reach out to a few of the newcomers and inactive members in your region to build interest though personal contact. Each of us adds some personal leadership to the PVRC cause.

I am writing this input on Thursday before the CQ RTTY WW contest. Last year Mike, W0YR won it for North America, single op all band low power, and, Mike, K4GMH won it for HP. There are many winners among us, and many more of us are having a lot of fun operating and growing our capabilities.

Contesting as the Solar Indices Plummet (Part II)

By Fred Laun, K3ZO

Thanks to all for the comments received thus far on the first part of this series.

W6NRJ asks: "You state that conditions are more disturbed when a cycle is in decline than when it is rising. The example you used in your analysis, October 1998, occurred during a time when the cycle was rising. Wouldn't it be more useful to look at your log at a time when solar flux numbers were roughly the same as they are now, but when a cycle is in decline, as this one is right now?"

Very astute of you Jim, and I agree. So with the help of Jan Alvestad let's see if we can find a period around a past October when the numbers were about what they are now -- SFI = 130 -- but during the declining phase of a cycle. October 1992 looked like a good candidate but just about the time the CQWW was arriving the solar flux suddenly shot up to 225. (We could always hope that history would repeat itself, of course, and that the solar flux would suddenly increase during this year's CQWW -- wouldn't THAT be great?)

By the time October 1993 rolled around, the solar flux was holding mostly around 90 though in mid-October there was a broad rise to about 125 before the flux dropped back to 90 before the start of the CQWW SSB.

October 1983 provides a better comparison, because although the solar flux dipped right at the end of October to around 90, it had been holding pretty steadily at around 110 to 140 and even higher until just slightly before that. Let's see, where was I when the October 1983 CQWW SSB contest took place? It appears that I was in Colombia operating that contest as K3ZO/HK3. While I have the log, there is no way for me to make a valid comparison between conditions there and what conditions might have been like here at that time. However, those of you who were operating from this area at that time might want to take a look at your October 1983 CQWW SSB logs and you may get a pretty good idea about what to expect this time around.

An important point: Since seasonal changes can have just as much or more of an effect on propagation conditions as the solar flux levels, I am reluctant to compare October conditions with anything other than conditions in an earlier October. It is true that, just as September conditions track rather well with April conditions, so do March conditions track rather well with October conditions. One might even say that the ARRL phone DX contest, coming as it does in very early March, is a good counterpoint to the CQWW SSB coming as it does at the very end of October. Still, on the one hand the bands are in the process of thawing out from winter conditions while on the other hand they are in the process of passing from summer to winter conditions, and the respective trends have their own effect on conditions, which is another reason why I want to compare Octobers only with Octobers.

Maybe the best I can do is look at both 1992 and 1993 CQWW SSB logs and see whether we can make a blended forecast taking both into account. Right off the bat, I see that, paradoxically, I made more QSOs in CQWW SSB 1993 than in CQWW SSB 1992 despite the fact that one would initially think that conditions should have been better in the earlier contest. Which goes to show that just because 10 meters isn't as good this year as it has been in the recent past, there is no obvious reason why 20 and 15 can't pick up the slack.

Let's see how the bands compared, 1992 CQWW SSB vs 1993 CQWW SSB: (all times UTC):

10 meters

1992: Was open at 1200 to Europe. European run included Scandinavians and lasted until 1800. Good JA run from 2215 to 2300, then ended.

1993: Opened to Europe at 1300. At first had to work most stations on side-scatter with beam on North Africa, within half an hour they had straightened out to direct path. Few Russians or Scandinavians except on bent path. Good volume of Central and Southern Europeans, but during last hour of opening those worked were almost all EA or I. No JA at all, but VK, ZL, KH6 and KL7 were OK.

15 meters

1992: Opened contest on 15, good run to JA/Asia until 0030. Good long, robust European opening from 1130 to 1915. JA back in at 2100. Good runs there.

1993: Fifteen not worth using at opening of contest, started on 20 instead. Open to Europe at 1215, including Russians and Scandinavians. Good strong opening until at least 1740. A few JA available around 2130-2200, not able to run them but only S&P a few loud ones. VK and ZL good.

20 meters

1992: After opening contest on 15, got here at 0050. Mostly South Americans but Africans and Siberians were also workable until 0200.Some Europeans workable around 0600-0700. Europe in again solid at 1030, opening lasting until at least 2100. JA and East Asians good from 0000 to 0040.

1993: Had to open here on 20 this year as not enough volume available on 15 to justify opening there. Stayed on 20 until 0050, working mostly South America along with some Africans. After a brief sojourn to 40, I was back on 20 at 0130 and had a good run to JA until 0200. 20 was open to Africa/South America until at least 0300. 20 open to Europe by 1100, opening available until at least 2000.

I'm going to end my band-by-band analysis at this point because the idea has been to use this space to prepare the reader as well as possible for what you are likely to find in this year's CQWW SSB. For most of you the antenna hardware I have on 40 and 80 [particularly 80, where Fred has a laaaarge yagi - ed.] is not relevant to what you are able to put up, so I don't feel that a detailed comparison of those bands is very useful to you.

Before closing this month's piece, I would like to make the following additional points, germane to the CQWW SSB this year:

Given that my total QSOs actually increased during CQWW SSB 1993 over what they were in CQWW SSB 1992, even though the solar flux was higher in 1992, here is my best guess as to some of the factors involved:

1) I had one more year of experience under my belt so I had gotten better. Since I have been contesting heavily since 1952, I doubt that this was an important factor. However, I only began computer logging in 1990, so there is a possibility that greater experience in this area was a factor.

2) More likely, the lower solar flux, making my higher than average antennas play relatively better, allowed me to better hold run frequencies on 20 and 15, attracting more business relative to many others in the contest. I think the long runs on 15 with my 8-el Telrex monobander at 155 feet were an especially important factor here. Also, the lower absorption on 80 meant I could have longer and easier runs there.

3) The availability of fewer band choices at any given moment in the 1993 contest meant that fewer decisions had to be made, and therefore decreased the possibility of serious errors in band choice.

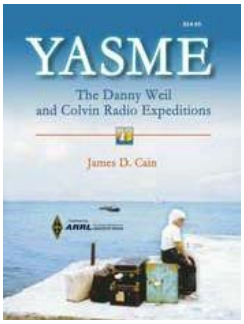
For the fellow or gal with a tribander at 50 feet and wires, the gradual diminishing in importance of 10 meters will probably have a negative effect, since there will be less spectrum available for running, therefore requiring more S&P. Since others similarly equipped will also find it more difficult to run, there will be more callers in each pile-up as a result. Also, when 15 closes and 20 becomes the "only game in town" for most of you, 20 will become a very crowded and difficult band. On the other hand, the fellows in New England, who are loud here on 20 during higher solar numbers, will be skipping over a lot more, which should decrease the severely loud QRM we experience when beaming Europe.

For someone like me who is allergic to SO2R operation, the advantage obtained by users of SO2R is also lessened, since during many contest time periods there won't be enough business on a second band to make SO2R very productive relative to those of us who choose to use only one radio.

So now you have my broad predictions for CQWW SSB 2003. You will be soon be able to tell whether they were any good or not. Next month I will try to apply my crystal ball to CQWW CW 2003 and 2003 SS.

[Fred plans a series of articles on different aspects of propagation -- please let him (and me) know if you enjoy these articles, and if there are particular topics you'd like to see addressed - ed.]

Book Review
by Don Lynch W4ZYT



Yasme: The DXpeditions of Danny Weil and the Colvins
James D. Cain K1TN
American Radio Relay League Press, Newington Connecticut, 2003
320 pages, softcover - ISBN 0-87259-893-4

For those of us who became hams and began to chase DX in the fifties and sixties, the names of Danny Weil and Yasme conjure up all sorts of exciting images. For many of us who were avid DXers as 60's teenagers, ham radio went on the back burner while we sought our educations and began to raise our families. When we returned to ham radio after we settled in to our lives and our jobs, the siren call of DX returned, aided and abetted by Lloyd and Iris Colvin. As our families became more independent and our kids became older and began to do more on their own, many of us returned to chasing "new ones" on the bands, and Lloyd and Iris were central to many of these pursuits.

James D. Cain's *Yasme: The DXpeditions of Danny Weil and the Colvins* (ARRL, Newington, CT, 2003) is a welcome addition to the expanding written history of ham radio DXing, and compares to Jan Perkins' *Don C. Wallace W6AM: Amateur Radio Pioneer* (Vestal Press, Vestal, NY, 1991). It focuses on three major players in post-World War II DX: Danny Weil, VP2VB, an English adventurer whose goal of sailing around the world solo brought him into ham radio, and on Lloyd Colvin, W6KG, an American army officer, and his wife, Iris, W6QL, whose DX exploits began in postwar Japan and later, in the 60s, 70s, 80s, and early 90s, took them all over the world. Like the Wallace biography, Cain's story uses contemporaneous records, pictures, and personal documents to portray with precision and clarity one of the most exciting periods in amateur radio.

Danny Weil was an English clockmaker who set out to circle the globe in his small sailboat, the *Yasme,* in the mid-fifties. In 1955, while Weil was visiting the American Virgin Islands, he met noted DXer Dick Spenceley KV4AA. Spenceley suggested that Weil combine ham radio with his visits to various exotic locations. Weil proceeded to obtain his license and was assigned callsign VP2VB. It was Spenceley's vision that Weil would travel to various DX locales in his boat and put those locations on the air for the world to work. Over several years and through three different *Yasme* sailboats, Weil, Spenceley, and several other major DXers of the day devised the Yasme Foundation, in which DXers interested in supporting the various *Yasme* expeditions purchased subscriptions to the Foundation in support of the operations. While the number of DX contacts actually made by Weil over the years he was active was modest by modern DXpedition standards, the concept of the sponsored DXpedition was born.

Lloyd Colvin, first licensed in 1929, and his wife Iris, licensed in 1945, became avid DXers in the postwar years while stationed in Japan, and subsequently operated from a number of other overseas postings. Upon Lloyd's retirement from the Army, he and Iris established a highly successful construction company, and began to travel in the 60s, 70s, and 80s with the express purpose of operating as DX from various foreign countries. They were successful in visiting over 200 countries and actually qualified for DXCC from over a hundred different DXCC locations, becoming along the way celebrities known for their presentations at various hamfests and amateur radio conventions as well as for their operating exploits. Few hams active during this period don't have at least one contact with a Colvin operation. Although they largely financed their trips themselves, the Colvins were instrumental in reviving the Yasme Foundation to serve as a sponsoring organization and fundraising organ for their own and other DX operations. The Yasme Foundation, which sponsored this book, continues its work today, based in Castro Valley, California.

Cain's book is well-organized and well-written, interlacing the stories of the Colvins with the exploits of Weil and his succession of *Yasme* craft. Reading about Weil's ventures, one appreciates how different and how challenging working DX in the fifties and sixties was from today, and how much the DXCC program has evolved. The business of obtaining a ham license from most foreign jurisdictions was either impossible or very complex - in fact, the United States had no reciprocal licensing arrangements with any country except Canada until the 70s, making it difficult to secure permission to operate in many areas where obtaining a license today is a given. Equipment was massive and power requirements were challenging. Despite these obstacles, the Colvins, acting as unofficial ambassadors representing ham radio, were often able to succeed in fielding operations from locales where other DXpeditioners had been unsuccessful. Much of their hard work, gentle assertiveness, thoughtful diplomacy and good will form the basis for the good relations ham radio enjoys in many countries today.

K1TN has succeeded is compiling both a meticulous history and a highly readable story, which will resonate with many hams who either remember or grew up hearing stories of these three DXers. Even for the newest additions to our hobby, the story of early postwar DXpeditioning - an era before computer logging, before packet clusters, before e-mail, before reciprocal licensing - should be fascinating. The book includes many pictures, maps, and statistics. It is certain to take its place in many ham libraries as another important contribution to the history of ham radio.

PVRC Spotlight

By Jim Nitzberg, WX3B

David Collingham, K3LP

Many of you already know David Collingham, K3LP. David was nice enough to provide an excellent biography based upon my favorite questions. Hopefully, PVRC members will be viewing more details on David's (to be completed) web site.

How did you first get interested in Ham Radio?

I first got interested in radio communications and electronics working with my Grandpa Boo (Raymond Charles Collingham), at the age of 9, at his radio communications and TV repair business in Baldwin Park, California.

In 1973, a new high school friend of mine, Steven Cook (ex. WC6IFG, now WG7K), had his ticket and introduced me to Amateur Radio. At the time, Mr. Louis P. Malory (WA6DVK) was head of the Fontana High School English Department and also set up an Electronics and Communications program for high school students.

I enrolled in the Electronics and Communications program in 1975. The students in the group set-up the new low power commercial broadcast and amateur radio stations at the high school and were responsible for maintenance. We also studied electronics theory, and prepared for amateur and broadcast license tests.

Who was your Elmer?

Louis Paul Malory (WA6DVK) was my Elmer. He was responsible for taking the time to teach me Morse code and the technical information needed to pass my Novice Class license (WN6KTF) and Third Class Radiotelephone Licenses in April 1975.

What set you over the edge?

After seeing my friend Steven Cook's new Drake C Line, in 1974, the blue tinted meter displays and the glowing filaments in the Drake L4-B amp were impressive and are vividly planted in my memory.

Where did you first operate from and what was your equipment?

In April of 1975, I received by Novice Class Amateur Radio License, WN6KTF, at the age of 16 while attending the 11th

grade in high school. While living at my parent's home in Fontana, California, my high school friend, Steve Cook and I converted an old chicken hut into my radio room. I would often spend all night operating, six and seven days a week, sometimes using a flashlight so my parents won't know I was still up on school nights. I would be lying if I said I never saw the sun come up on school days without sleeping. I was an excellent student and missed very little school. After all, we had an Amateur Radio Station, WB6HJJ, at the Fontana High School thanks to our Elmer, Louis Mallory (WA6DVK). I remember always reading the old QST magazines and often dreamed about having the ultimate contest or DX station.

The chicken hut, with a tin roof, cement floors and no insulation, would get real cold during the winter and very hot during the summer months on the desert, but nothing distracted me from operating the radio. As a kid, that chicken hut radio room was the greatest. My parents purchase me a new TS-520 from Henry Radio in Anaheim and I had installed Inverted Vee's and a home brew 2 element 10 meter beam I made using an old QST magazine article.

After graduating from Fontana High School in 1976 with my General Class License (WB6KTF), I headed to DeVry Institute of Technology in Phoenix, Arizona. Before graduation, I passed my Advanced and Extra (AA6DC) Amateur Radio Class Licenses, and FCC Commercial 1st Class Radiotelephone Broadcast License.

Like many others, this is when responsibility stepped in and took ownership of my life. I got a career and good paying job, got married and had a few children (five to be exact), strapped myself with a new mortgage and car payment, and repeated it at least five more times as I advanced in my career. The next thing I knew, I was working as much overtime as possible, barely making payments and only operating contests when I could fit it in my schedule. The 1980's left little operating time for me.

Where Do You Live Now?

In November 1999, my wife Rebecca and I purchased a 25 acre lot about 5 miles from our last QTH in Mt. Airy, Maryland. The lot is absolutely wonderful; elevated with great views.

Do you have any comments about your operating time at W3LPL?

I have had the pleasure of operating from W3LPL during the ARRL and CQWW DX CW contests on several occasions. The operating style and team experience was interesting and of great value. Frank's regular operators work very hard to keep the W3LPL image respectable and record competitive. To operate for W3LPL is rewarding and very focused. I appreciate the opportunities and look forward to working from W3LPL in the future as needed.

Any other contest stations you care to comment on?

Over the years, I operated from W3GNQ's QTH for ARRL and CQWW CW and SSB contest. Operating from Dick's QTH was always fun.

What DX-peditions have you been on?

I operated as P40DC, J6/K3LP, J6R (3x), A61AF (2x), A61AJ (3 x), VP5LP, PJ7/K3LP (2x), AA6DC/GM4, M0/K3LP, LA9HW, 5H3LP, and A4/K3LP.

What Contest DX-peditions have you organized that involved more than one person?

- A61AJ in November 1997 CQWW DX CW, Multi-Multi, K3LP (leader) and KE3Q operators
- J6R in October 1999, Multi-Multi, CQWW DX SSB, K3LP (leader), N3NT, K3UG, J69AZ and K7KL)
- J6R in March 2001, Multi-Single, CQWW SSB, K3LP (leader) and J69AZ operators.
- VP5LP in February 2003, Multi-Two, ARRL DX CW, K3LP (leader), WX3B, N7DD and N3SB. We took 1st Place World.

What were your most exciting DX-peditions?

My most exciting DX trip was when I operated from the Dubai Men's College (A61AF) in June 1996. At this time, CW from this region was rare. I arrived at the station on a Friday afternoon and was given authorization to operate for the day. I didn't want to leave the college, thinking the guards would not allow me to return over the weekend without additional authorization, so I slept on the radio room floor using my jacket as a blanket until the following Monday. I made almost

3,000 QSO's using a hand key and ate from the schools vending machines. I remember my fingers being numb for days after the trip [if you need an A61AF QSL card, Dave still has the logs and QSL cards at his home - WX3B].

In November 1996, I operated from A61AJ's, Ali's personal home QTH for a week and also entered the CQWW DX CW contest as Single Operator, HP, Un-Assisted with the A61AJ call sign. During this visit, Ali and I planned my return trip in November 1997 to construct a multi-tower and antenna contest station at his farm location just outside the Dubai city limits. When I returned to Maryland, I worked with Norm (W3NRS) and Joel (RF Connection) to assist in quoting Rohn 45G towers and preparing cabling other tower materials for shipment. Ali decided to have the towers homebrewed about 2 weeks before arrival. W3NRS and I sent Ali a set of Rohn 45G Tower drawings for fabrication and foundation installation instructions. I had ordered KLM's 3 element 40 meter and 6 element 10, 15 and 20 meter mono-band antennas and shipped them direct to Dubai for installation in November.

For my November 1997 trip, Rich Boyd, KE3Q assisted with antenna assembly and installation work. The remaining on-site work was basic contester knowledge and some quick fixes to the tower foundation and anchors that didn't comply with plans sent in advance. We entered the CQWW DX CW contest as a multi-multi entry since there was no Multi-Two category at the time. W3UR (Bernie) was kind enough to accept the QSL Manager duties for all my A6 and A4 trips. Thank you very much, Bernie.

I returned to A61AJ in March 1998. At this time, I assembled two additional KLM 6 element mono-band antennas and increased the 20 meter tower from 100' to 150' with local helpers. The 6 element mono-banners were installed at 50', 100' and 150' levels using the WX0B Stack-match box. In addition, assembled the KLM 2 element 80 meter beam and installed it on a new 100' tower.

I operated the CQWW WPX in 1997 using A61AJ call making 3, 984 QSOs as a Single Operator.

What is your favorite contest? Why?

I enjoy the CQWW DX CW contest the most. I prefer CW over SSB, but feel I am effective at both.

Working CW reminds me of early morning fishing. As the sun comes up, you never know what you're going to catch.

What's planned for the next 6 months?

On November 14, 2003, Clint (W3ARS) and I will go to the French side of the island, St. Martin and will be installing two beams and a bunch of wire antennas. During this 10 day visit, we'll operate as FS/K3LP and FS/W3ARS. The equipment will be operated during the CQWW DX CW contest as FS5UQ.

The exciting news is that Rebecca (my wife) and I are going to have a new son at the end of November 2003.

The VP5LP team with two additional members has scheduled to activate FS5 for the ARRL DX CW 2004.

What was your most Exciting and Rewarding Contest?

After spending lots of money over the years going on DX-peditions, the ARRL announcement that our VP5LP contest team took 1st Place World in the ARRL DX CW contest, category Multi 2, in February 2003 was icing on the cake. We beat our nearest competitor by 1 million points and beat all DX multi-multi stations, thus having the largest DX station score. The team included K3LP (leader), WX3B (Jim), N3SB (Steve), and N7DD (Larry). This team was professional and focused.

We came about 13 QSOs short of the North American record set by 6D2A. We could have accomplished this easily if we had not lost a network card in the laptop on the second day. This caused a half-hour off the air.

Any Final Comments?

I've been a ham for over 25 years now, and have met friends all over the world. I enjoy my many friendships with PVRC and K3PZN members. K3UG (Barry), A45ZN (Tony), WX3B (Jim), NY3A (Steve), N3SB (Steve), and AK3Z (John) are the guys I most frequently exchange technical information with and maintain interest in the hobby. I want to thank them for their ongoing commitment and friendship.

VHF and Above Radio Frequencies
By Chuck Watts, W4XP

Once thought of as useless, now one of the most sought after resources in the world … use them or lose them!

Roving with K8ISK on our way home from Ohio wasn't very productive. If someone asked me what the activity was like, I'd have to say "pretty dismal." Like so many of the other VHF and above contests, except the Cumulative 10 GHz contest, the September VHF QSO Party has experienced a steady decline in participation.

In his April 2003 *QST* ***World above 50 MHz*** Column, Gene Zimmerman, W3ZZ, discussed at length the fact that there has been a steady decline in log submissions for VHF contests. This can loosely be equated to a reduction in the number of stations, not necessarily operators, participating in VHF and above contests. I won't recapitulate the content of Gene's article here, but it is worth reading or rereading to get a better perspective on the state of VHF contesting in general.

When the ARRL no longer printed Sprint scores in *QST*, and then *NCJ*, and subsequently ceased altogether to sponsor the Sprints, these events nearly passed out of existence until two years ago when the Southeast VHF Society assumed the sponsorship. Since the SVHFS has been collecting and compiling scores, Fall and Spring Sprints have experienced a steady increase in participation. It is too early to tell, but based on some of the postings I've read on the Internet, related to activity in the 144 MHz Sprint held on September 22nd, it appears that this years participation is suffering the same fate as the "big" VHF contests; a significant decline in participation.

I have to admit that I didn't participate in this years 144 MHz Sprint. But I did have, as many of the readers of this column had, some rather obvious extenuating circumstances known as hurricane Isabel! Downed antennas, flooded basements, and worst of all, no commercially available power! If your main AC is restored, and you have the station capability, we all need to participate, even if it's just for a portion of the contest period, to show that we are contesters and we support the SVHFS' efforts to keep the VHF and above Sprints alive.

The rules for all of the band sprints are the same and are available at: http://www.svhfs.org/fall_sprint_rules.htm. Put the dates for next year's Sprints on your calendar! It's too late for the 2-meter Sprint, and possible the 222-MHz Sprint, but here are the times for the remaining bands, including 222 MHz:

222 MHz Fall Sprint - Sep 30 (Tuesday) - 7 PM to 11 PM local time

432 MHz Fall Sprint - Oct 8 - 7 PM to 11 PM local time

Microwave (902 MHz and above) Fall Sprint - October 18 - 6 AM to 1 PM local time (Choose any 5 hours, in one hour increments)

50 MHz Fall Sprint - 2300Z Oct 25 - 0300Z Oct 26

Exchange: Call sign and 2x1 degree grid-square locator. Signal report optional; QSO Points are 1 pt/QSO. Total score: QSO points x grid squares. For rovers, count grid squares separately from each new grid square activated and submit separate logs from each grid square. Logs due 4 weeks from the end of the contest in ARRL VHF contest format.

144 MHz Sprint logs to: Ottmar Fiebel, W4WSR, PO Box 957, Hayesville, NC 28904 or to ottf@webworkz.com
222 MHz Sprint logs to: Bob Lear K4SZ, PO Box 1269, Dahlonega, GA 30533 or to k4sz@arrl.net
432 MHz Sprint logs to: Jim Worsham W4KXY, 1915 Oak Wind Lane, Buford, GA 30519-6766 or to w4kxy@arrl.net
Microwave Sprint logs to: Greg Robinson KB4NVD, 208 Dogwood Acres Rd, Hampton, TN 37658-3348 or to Rover@wireco.net
50 MHz Sprint logs to: Ray Rector WA4NJP, 3493 Holly Springs Rd, Gillsville, GA 30534 or to wa4njp@bellsouth.net

The next "big" VHF and above event is the ARRL January VHF Sweepstake. January is of course the month of Super Bowl, cold temperatures, and sometimes really bad weather! Next month I'll touch on some things to expect in the January VHF SS, not only participation wise, but propagation (or lack thereof!) too.

If you have suggestions or comments, please contact me at w4xp@arrl.net or send me a message via the DXCluster.

The Toolbox
By Don Daso, K4ZA

A few e-mails have trickled in, indicating that rivets are not well-liked, nor considered suitable for antenna/tower work. So, we continue our "treatise on fasteners" this month.

Ever been to France—to Paris? Notice that tower? Gustave Eiffel, an engineer who founded a metal-works company, decided a 300 meter tower should showcase the 1889 Universal Exposition in Paris. Construction began in July of 1887, and 22 months later, was completed. The tower sections were built at the Eiffel factory on the outskirts of Paris, bolted together, taken to the job site, hoisted up (using steam cranes, which were themselves then hoisted higher as sections of the tower went up), and then riveted together. Tolerances were extremely close, even by today's standards, for something of this size. There are over 2.5M rivets in the tower.

I can hear the arguments already. "That's great, Rundy, but steam power and rivet throwing are pretty much archaic skills today." Granted, but the point is that loose rivets still offer advantages to anyone assembling metal surfaces, such as simplicity, speed, and low cost. That's why you see them used so much (if you simply look). Rivets are ideal for flexible joints. Rivets work very well in tightly joined (mating) parts. Rivets are ideal where repetitiveness (pivoting) joints are required.

The point is, obviously, that rivets are okay to use. I have used them successfully for years. They are especially useful in smaller (say VHF) antenna projects. Don't rule them out because of rumors you've heard on the air or read about on the Internet. Don't believe all the horror stories from folks who haven't learned how to use tools the right way. Get a copy of Carroll Smith's *Nuts, Bolts, Fasteners and Plumbing Handbook*, Motorbooks International, 1990 (ISBN 0-87938-406-9). Learn and enjoy.

Next, on to stainless steel, the proper use of which is a perennial source of frustration, confusion, arguments, and so on, among antenna and tower-building hams.

What we term "stainless steel" really comes in around 60 varieties, or grades, of metals. All are essentially low carbon steel, which contains chromium at 10% or more by weight. The chromium is what gives the metal its corrosion resistant properties.

Arguments almost always arise about whether or not stainless steel is magnetic. The correct answer, that, "No, it's not," and "Yes, it is," certainly doesn't help. Here's the truth (right off the Stainless Steel Information Center's webpage):

***T*here are several "types" of stainless steel. The 300 series (which contains nickel) is NOT magnetic. The 400 series (which just contain chromium and no nickel) ARE magnetic.** So, walking around with a magnet will not make you an "expert" on stainless. But, reading the information on the SSINA website will get you closer, if that's what you want. And let's check the website and get that "A-word" definition out of the way right here (used and spelled correctly):

Austenitic stainless steel, which is the name given to a structure that has high ductility and consists of both chromium (15 to 30%) and nickel (6 to 20%). The original designation for this type of structure is the 300 series, sometimes called 18-8 or 18% chromium and 8% nickel, of which 304 and 316 are the major grades.

Arguments (or at least heated debates) also usually follow from those who believe stainless steel fasteners are "too weak" or brittle to use in ham tower/antenna projects. Again, a few minutes reading Carroll Smith's book will show you the proper ways in which to use bolts. And you will see that if you don't like rust running down the legs of your tower, then using stainless hardware does not mean you'll find your beam on the lawn some morning. If you live in a corrosive environment (say the Caribbean), it's the only answer. (I was amazed to see corrosive action taking place within two weeks time on St. Martin back in 1998, for instance!)

If you're still not convinced there are applications where stainless can and/or will make your life easier, you can simply check the library or the World Wide Web for further reference sources. Big industrial suppliers will often have pages of technical information available on their websites (thinking that if they can influence engineers, they'll buy, etc.), or links which contain such information. For instance, check out Marine Fasteners, Inc. as a typical example: http://www.marfas.com/products.shtml

I've purchased stainless hardware from TEK SUPPLY for years, and never had a problem. Their service and prices (the hardware is probably Chinese in origin) are hard to beat. But their on-line catalog isn't that great; get the old standby paper version. This farm supply company also stocks a variety of things the modern tower and antenna builder will find useful, like rope, cable ties, turnbuckles, thimbles, electrical supplies, and so forth.

Using stainless requires some modification to your work methods. If you're used to spinning nuts on, or using power tools, in a word, *stop*. The faster "speeds" will cause the stainless to "gall" or seize. Basically, as the two surfaces run together, they will heat treat themselves, and pieces of the top layer will be deposited on to the bottom layer, causing the seizure. The simple solution is to use "anti-seize" compound, or some other lubricant, and install the fasteners slowly. (I carry a tube of Teflon grease in my tool pouch. It's small, slippery, simple to use, and doesn't stain like some other lubes.)

Keep the questions, suggestions, and comments coming. What's in your toolbox?

Why RTTY Contesting?
By Mike, K4GMH

Pete, N4ZR, (Newsletter Editor) asked me to write a bit on RTTY contesting. A couple of suggested topics were the joys of (if any?) and/or the how-to-do-it (if different than other modes) for RTTY contesting. Addressing the "how-to-do-it" should cover both. Maybe you have been thinking of trying RTTY contesting. Hopefully, the following will help you decide it is worth the effort.

In my view, RTTY contesting has a lot in common with other modes (SSB/CW) of HF contesting. You have HF propagation to contend with, submit logs, competition, etc. Some differences (major/minor?) you will find in RTTY contesting is the reduced pace (QSOs per hour) over the length of a contest, fewer participants, some of the rules are different than other modes for the same sponsored contest, 100 percent transmitter duty cycle instead of 20-30 percent for other modes, additional software and hardware required to participate, and different receiver tuning technique.

Examples of the differences are:

- Pace -- 40 or 50 per hour QSO rate over the length of a major contest, e.g., RTTY Roundup, CQ WW RTTY, should put you in the top ten. A hundred plus QSO rate for ten minutes is possible if you have a good station for the contest. The fast (truncated) response between stations isn't a norm in a RTTY contest. Still, it seems that after each major RTTY contest, the RTTY Reflector will have at least one epistle on why and how the exchange between stations can be sped up. The nature of RTTY has a certain amount of control over the pace as the sending and receiving speed is the same between the most experienced RTTY contester and the newbie – 45.45 baud (60 wpm). This pace limiter forces all to realize that RTTY contesting is not about how fast one can speak or send his exchange. The ability to type rapidly and accurate is at the same level as needed for SSB/CW contesting. The transmitting portion of your RTTY contesting is similar to the way you provide information in other mode contesting as most of the transmitting is done by function key initiated macros. New hams to the RTTY mode seem less intimidated and readily join the fun of RTTY contesting. Also, the experienced RTTY contester realizes that if he takes a few minutes, during a contest, to help the newcomer he won't fall behind his competitors since they are limited by the same 45.45 baud exchange speed.
- Number of participants -- any RTTY contest has no more than half as many participants as a major ARRL SSB/CW contest. Fortunately, the number of logs per RTTY contest is increasing. The World RTTY Contest Scene web page, http://www.rtty-contest-scene.com/index1.html, has a graph showing an increase each year over the last three years in the number of submitted logs for the 17 yearly RTTY contests. Still, one major ARRL contest like SS will have as many logs as all 17 yearly RTTY contests.
- Rule differences -- one contest with a major difference between SSB/CW and RTTY is the WAEDC. In the RTTY version of this Contest there are no continental limits – everybody can work everybody. QTCs must be sent between different continents, but every station can send and receive QTCs. However, only a sum of ten QTCs can be sent or received between two stations. The SSB/CW sections of the WAEDC allows QSOs only between European and non-European stations. Also, QTCs can only be sent to European stations.
- One hundred percent duty cycle for the transmitter/amplifier -- welcome to RTTY. SSB/CW duty cycle is between 20 and 30 percent. If your transmitter/amplifier or antenna system can't tolerate the higher duty cycle, then consider operating in the lower power category. Just about all the RTTY contests have LP category. RTTY contesting will find any weak spots in your transmitting system.
- Additional hardware/software -- this is assuming you already have a radio/computer connection. If you are doing

SSB contest using the computer to send "DVP files," then the only additional hardware may be another cable between the radio's audio output and the computer's sound card line input. The computer can then decode the received RTTY signal. The sound card generates the mark/space tones and sends them to the radio over the same audio cables used for SSB contesting. If you are using Writelog, you already have S/W capable of decoding .the received RTTY and generating the mark/space tones. However you will have to become familiar with the operation of this WL feature.

- Receiver tuning technique -- the computer has to "hear" the mark/space tones to decode RTTY. This is different from SSB/CW as you determine when you have the signal tuned in by your ability to copy the information. With RTTY, the computer decodes and turns the mark/space tones into meaningful information. You have to properly tune in the RTTY signal so the computer can do the decoding. Fortunately, the RTTY S/W provides a tuning indicator allowing you to place the received mark/space tones within the usable decoding range of the computer. Yes, you could operate a RTTY contest without hearing any of the received signals. However, you'll find as your ability improves to distinguish the audio of a proper tuned in RTTY signal, the easier it is to be get the signal into the acceptable decoding range of the computer. With practice, using both audio and the computer generated tuning indicator allows one to rapidly tune in a RTTY signal for proper decoding.

So that's a snapshot of some obvious differences between SSB/CW and RTTY contesting. "Why do I like RTTY contesting" is a question that kept creeping into my mind as the above was written. Some of you are SSB-only contesters, others are CW-only, others concentrate on VHF and then there are those folks that like to do them all. "Why" has to be answered by each operator. In my case, pinned down to give an answer, the above paragraphs are why I like RTTY contesting.

[editor's note -- Mike is one of the leading RTTY contesters in the country, and I'd like to get him to tell us more, for example an article giving specific recommendations on how to get started in RTTY contesting. If you think that's a good idea, drop him, or me, a note.]

Around the Club

Meeting minutes from the regions

Northwest Region September 2003 by Bud Governale, W3LL

The NW Region met at the City Buffet in Frederick, MD on 16 September. In attendance were K2PLF, W3KHZ, W4AU, K4VV, W0YR, NE3H, K3WC, N3II, N3UM, N3VOP, K3ZO, W3ZZ, N3YDT, W3EKT, W6NRJ and W3LL.

A lot of good informal discussion took place both before and after the meeting.

K3ZO, Fred expressed condolences for K3HCE who was fatally injured by a drunk driver while crossing the street after attending an Orioles game.

K4VV, Jack provided an update on the PVRC circle discussion and the conclusion reached by the circle committee--KE3Q, Rich, K2AV, Guy and WX3B, Jim, supported by N3OC, Brian, and K4VV, Jack. [details are in K4VV's report - ed.] A motion was made by Jack, K4VV to relocate the circle center as described. The motion was seconded by Mike, W0YR and passed unanimously.

W3ZZ, Gene reminded everyone about the 30 minute minimum off time requirement for the Sweepstakes and other ARRL contests.

W0YR, Mike circulated a get well card for K6IR, Ken Miller.

From around the table ...

K2PLF, Marty worked the VHF contest from W3SO. He noted that countries which eliminated the morse code requirement had good participation in the WAE contest.

W3KHZ, Art did not work the VHF contest because his gear is still packed up from his Canada trip. He did make QSO's with many of the Route 66 special event stations. Art is planning to install two more towers to accommodate 6m and 2m beams.

W4AU - This was John's first meeting. His main interest is CW contesting, especially the sprint contests. John bought an

Orion 4 days ago and likes it a lot.

K4VV, Jack is working on fixing up his Super- and Big-Bertha towers. He is working to have one of them ready by November. He worked the VHF contest at W3SO along with ten other operators. Jack gave well deserved kudos to N4ZR, Pete for an outstanding September newsletter. Everyone agreed. Jack also noted those PVRCers who produced top scores reported in various publications. He also commended W0YR, Mike and N3JT, Jim for their leadership and hard work to write and distribute the PVRC FCC submission on the BPL issue.

W0YR, Mike noted that the "codeless contesters" were good and wondered where they got their training. He is getting ready to put up an 80M antenna.

NE3H, Joe had no comments.

K3WC, Dusty's towers are still on the ground.

W6NRJ, Jim has been away from our NW meetings for the last 5 months. He discussed three points 1. Get on 12M or loose it like 11M. 2. Shawn Hannaday is donating $5K (or more?) to a Retired Marine who is restricted by deed covenants from putting up a flagpole (could be a stealth antenna?). 3. If BPL is permitted, 6M and HF will be unusable. Japan gave up on BPL because of strenuous HAM objections. Jim congratulated Fred, W3ZO, for his outstanding contesting article in the September PVRC newsletter.

N3II, Dave, noted that NTIA, which represents the Pentagon views in the BPL issue, does not want it. Dave will be taking his 29' fifth wheel trailer to FLA in January. He noted good conditions during the VHF contest.

N3UM, Ben, purchased an Orion in June and also likes it a lot. He tried it during the IARU contest with W3LPL and K3ZO on either side of his frequency - the brick wall filters did a good job in keeping the frequency useable. He found the 60M band boring. During an Alaska vacation, he lost some elements on his beam from a falling tree limb and had it repaired. Ben switched from CT to Writelog which he used in the VHF contest.

N3VOP, Mike passed around an X rated nudist colony QSL card received for a QSO with AG1RL. The card generated a lot of interest. Mike asked why there were two PVRC 5M contests (WAE & VHF) during the same weekend. The response was it's a coincidence which happens once every 10 years. It was noted the ARRL June VHF contest does not presently count as a club competition event. The Carroll County club had a bike tour in Thurmont on Saturday which prevented Mike's participation in the VHF contest except for Sunday.

K3ZO, Fred was delighted with his stay at Marty's (K2PLF) Hawaii QTH during his ARRL trip. He participated in the All Asia contest, noting good 15M conditions. Fred also participated in the VHF contest last weekend. The contest produced no 6M E skip. There was some scatter on Sunday morning.

W3ZZ, Gene noted it was a good VHF summer, producing the best 2M E skip in history. Europe had about 30 openings. In the US, there was a big 220 MHz E skip opening. September produced several tropo openings including a record breaker. Gene noted that tomorrow night should produce some tropo openings thanks to hurricane Isabel. He participated in the VHF contest. Gene's towers are in need of reguying. His 80M antenna fell down and his 40M antenna has been down for some time. He plans to put up an 85 foot combination 160M & 80M 1/4 wave sloper.

N3YDT, Jim has been off the air the last 3 months. He has 104 countries confirmed on 6M.

W3EKT, Ed added 5 new grids during 2M tropo openings and made 100 QSO's in the VHF contest. He does not plan to take down his rocket launcher supported antennas because of hurricane Isabel. Ed now has slight improvement in his vision. He is using Writelog to blow up text.

W3LL, Bud attended Fallfest and worked the WAE contest. Bud announced his retirement from Black and Decker last week after 33 years with the company.

The meeting was adjourned at 8:30 PM and followed by a continuation of informal discussions.

Southwest Virginia Chapter The SW Virginia Chapter PVRC held its first meeting of the season Friday, September 5th. In riotous attendance were Mike - N4GU, Anthony - WM3T, John - W4MAN, Susanne - W0MAN, and David

N4JED. Additional words were sent by K1GG, K4IQ, W4YE and K1SO (more on that later). Our regular waitress Kim has returned and kept us well fed and barely under control.

First off, the chapter sends their best wishes to Buddy-W4YE and his father and family. Buddy's step mother passed away this past week, and Buddy was down south with his father. His presence and guidance were missed by all present.

John and Susanne are keeping busy on the air now that antennas are up and working, though the bands have not been encouraging.

David was the only one present to work the WAE contest, and then just briefly between storms. He has finally submitted his paperwork for CW DXCC and awaits to hear back.

Anthony has set up his own domain and server system. He is busy relocating several ham radio club web sites and the chapter's reflector to it. Discussions were entered about connecting thru his site on the web to the PVRC cluster and reestablishing an on-air DX cluster in SW Virginia. We tabled further discussions until we could get K1GG's input.

Anthony has recently updated the Chapter's in-chapter 5-mil contest standings. Buddy took a further leap to the lead with his recent contest showings, leaving David a more distant second. Watch for more serious attempts to catch up from the low power station. Be sure to check out the scores at the bottom of the PVRC web site score page.

Additional subjects ranged from best bands per contest for rates to antenna options for portable operations. Everyone present discussed their Field Day attendance and four different VA clubs benefited from a PVRC presence. It was noted that the proposed Russian DX Contest for the PVRC 5-mil award fell on the VA QSO Party weekend. Most of our members participate mobile in the QSO party and possible the same for other chapters. So there may be some conflict in operating if this event is added. We hope that further consideration is given to this.

Having finished up his thesis, Southwest Virginia Chapter Regional Coordinator Mike Barts - N4GU is looking to move out of the region and has decided to pass on the reins of the position. In a surprise vote, following much behind the scenes telephoning, David - N4JED was coerced into accepting the position by a unanimous count. Mike, having about finished his time at VA Tech, is busy searching the real world for employment. Several prospects could keep him within the club circle while others are in cooler climes.

We do express our thanks to Mike for his fine leadership and wish him well with his move from the college environment to the real world <grin>. He is working hard to stay within the PVRC circle and we hope to see his scores continue to be added to ours.

Notes were taken of the behind-the-scenes plotting (K1GG, K4IQ, etc) and a Secretary will be selected at the following meeting. Everyone is invited to be in attendance to protect themselves.

The after-the-meeting parking lot gathering was attended by all (actually due to the fine weather, several groups were outside after dinner). Discussions ranged from advantages of JT44 communications to a possible EME special event. Other tales too good to put in print were also heard. You should have been there.

The next meeting of the Southwest Virginia Chapter PVRC will be Friday, October 3rd, 6pm at the Roanoker Restaurant, Roanoke, VA. Let's try and have a better turnout. And mark your calendars for the next couple meetings, November 7th. and December 12th. See you there.

The **Laurel Region** held a short quarterly meeting in conjunction with the LARC monthly meeting on Sept 14. The club wants to make a significant effort in the CQ WW DX SSB in October, and the SSB SS in November. That means we need some significant antenna work and several work parties were scheduled. We lost our 75-40 meter dipoles (know one knows when or how), and the 2/440 colinear got fried in a lightning storm this summer. Attending the meeting were W3YD, W3DAD, N3TZA, WV3D, KB3BWR, N3JMK, K3HDM and KB3EQH.

Don't Miss CQWW SSB -- Beginning at 0000Z October 25

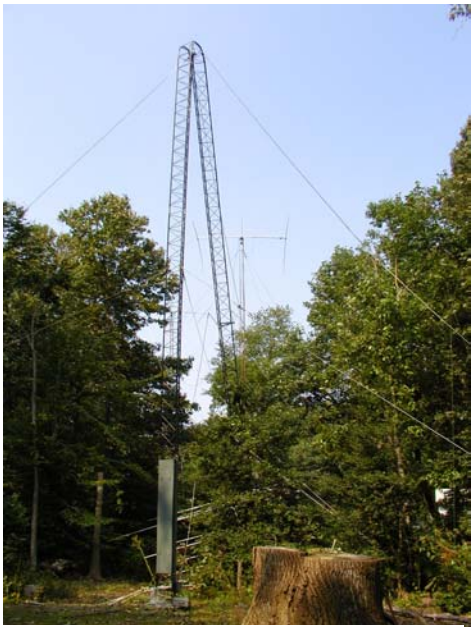
This Just In … Look for 4X/KC8FS in CQWW Phone

Hal, KC8FS, advises he will be in 4X this month, and plans to be on the air there for CQWW SSB. He says, "I will likely be operating from the IARC Club Station in Raioot but am working on another possibility. Am trying to nail down some of the details coinciding with my scheduled travel arrangements but do intend to make some noise on the bands from 4X and especially will be looking to give out multipliers to the PVRC gang."

Hal promises to update specifics [presumably via the PVRC reflector] as his plans firm up.

Weather Woes
By the Editor

Dick, K3DI, suggested that we might run pictures of damage from Hurricane Isabel. Dick generously contributed pictures of his tower casualty (see the photo at right), which resulted when an 84' tree fell on the guys of his 100' Rohn 45 tower, bringing his C-31XR and the top 50 feet crashing down. There are some things that you can't design against, no matter how careful you are!



K3DI's Rohn 45 and C-31XR

Some other club members also suffered major damage. K4JA's 40-meter rotating tower apparently twisted till it broke, bringing down his stacked K3LR yagis and 178 feet of AB-105. I commented to Paul that at least it proved the strength of his worm-drive tower rotators, since the tower failed before the worm drive did. Small consolation! However, at press time Paul was well into salvage and reconstruction. Photos are below.

Others, fortunately, took major defensive steps before the storm and did relatively well. Howie, N4AF, who lost virtually everything in another hurricane a few years ago at his previous QTH, was near ground zero for this one but reports that he had most of his antennas on the ground in advance of the storm and suffered only relatively minor damage.

If you have pictures from your QTH that you'd like to share. Send them to me -- n4zr@contesting.com.

K4JA's 40M tower before...

… and after Isabel

5M Scores
Compiled by W2GG

WAE CW 2003 #2 September 15, 2003

Single Op - High Power

CALL	QSOs	QTCs	MULTs	SCORE
N4AF	1589	1582	158	1,303,281
KD4D	1499	1483	163	1,237,530
K4JA	1395	1393	164	1,156,605
W3BP	1105	1070	124	627,130
N4CW/1	750	748	114	404,190
K3DI	559	554	121	320,544
K4GMH	603	601	110	318,795
N4ZR	445	444	###	157,353
W3HVQ	311	308	87	137,814
K2UOP	182	180	72	60,287

Single Op - Low Power

WJ9B	834	832	124	510,234
K7SV	584	575	115	326,838
N8II	568	567	109	280,324
W3CP	139	136	125	34,375
K3SV	102	97	43	20,497
N4MM	32	20	21	2,184
N4JED	5	0	5	50

Club Score: 6,898,031

Operators:
K4JA - K9GY at K4JA
KD4D - at N3HBX

WAE PH 2003 #2 September 18, 2003

Single Op - High Power

CALL	QSOs	QTCs	MULTs	SCORE
KD4D	1912	1710	163	1,517,618
W4MYA	1886	1668	151	1,371,141
K3DI	640	638	118	374,161
NX9T	366	362	68	110,200
K3SV	262	257	83	104,319
K2UOP	153	150	65	44,541
Single Op - Low Power				
W0YR/4	904	903	113	466,206
W3LL	201	153	###	78,234
N4JED	70	57	61	7,747
Multi-Op				
K4JA	2230	2088	174	1,986,280
WX3B	641	626	121	394,680

Logs PH: 11, CW: 17
PH Score: 6,455,127 CW Score: 6,898,031
Combined Logs: 28 Combined Score: 13,353,158
Operators:
K4JA - K4JA K9GY KE9I W3BP
KD4D - at N3HBX

ARRL Sept VHF #1 18-Sep-03

Call	Power	Bands	QSOs	Mults	Total
Single Operator					
N3OC	H	6	472	148	106,708
N3UM L	2	126	37	4,662	
K3ZO	H	2	375	84	31,500
K2UOP H	7	370	142	80,798	
N3II	L	2	181	48	8,688
N4JED L	#	19	6	114	
Multi-Op					
W3SO	H	4	1208	239	375,947

Logs: 7 Club Score: 608,417
Operators (non-PVRC in parentheses):
W3SO: WR3Z W3BTX K4VV K2PLF AI3M K3IXD K3RUQ W3PAW KD3SA W3TEF W3YOZ
- missing data

The Simplest Sound Card Interface

by Pete Smith, N4ZR
reprinted from *National Contest Journal,* September-October 2003

Like many contesters, I use a PC sound card as a "voice keyer" in phone contests. After trying the expensive RigBlaster solution (which had a lot more capability than I needed) and wrestling for a while with Radio Shack cable solutions, I hit on a simple circuit that seems to work really well.

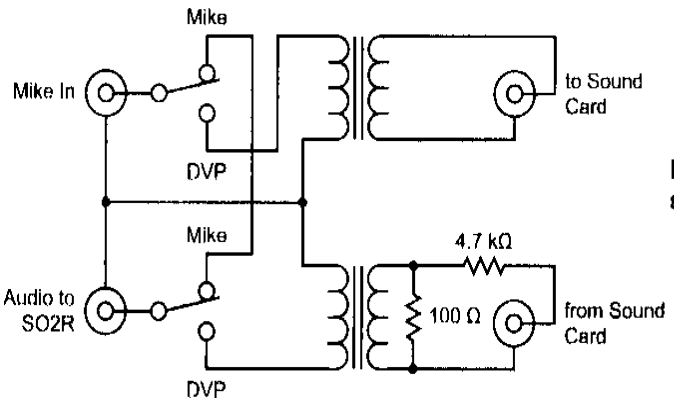


Figure 1—The N4ZR simple interface.

The transformers are 600-ohm Radio Shack isolation transformers, and the toggle switch is an ordinary DPDT toggle. The whole thing is mounted in a plastic Radio Shack project box. The sound card must be able to work full duplex (most are), which enables me to feed the mike through the sound card and back into the rig when using the voice keyer. I use an old ISA Sound Blaster 16 in my contest computer.

The isolation transformers prevent ground loop hum, which has been a bugaboo in my station for years. The only grounds in the circuit are on the sound card end of the two cables. The line to the sound card goes to its mic input, while the sound card audio comes from the line output. The voltage divider reduces the audio level to match the input level of my transceivers; with the switch in the DVP position it feeds the sound card audio into the microphone input of my SO2R switchbox. I use the sound card software mixers to set levels – there is plenty of flexibility there.

If your shack is "hot" with RF, bypassing the to/from sound card jacks would probably be a good idea. You could also add a normally-closed pushbutton to serve as a "cough switch," since the microphone is always on; I use a foot switch and software control rather than VOX, so this isn't a problem.

The PVRC Store

The **PVRC Store** is reopened for business with a selection of apparel and accessories for **PVRC Members**, which we hope will please and will enable us to "show the colors" of our fine organization and proudly display the logo of an esteemed and accomplished group of amateur radio contesters. We hope you will consider placing an order.

We have, with no small effort, been able to hold the line on prices from our last order in early 2000. In addition to the basics being offered, we are working on a long sleeve, light blue or white dress shirt with an embroidered PVRC logo for about $30.00, in sizes up to 4X. Please let me know if you are interested and I will include it in next month's advertisement.

Item No. 1 - **PVRC Tee shirt, white color, with a pocket and a large, 3 color, silk-screened PVRC logo on the back and a small, 3 color, silk-screened PVRC logo over the left breast.**
Circle Size M, L, XL _____@ $14 each; XXL _____@ $16 each = $_____

Item No. 2 - PVRC Golf shirt, white color, with a small, 3 color, silk-screened PVRC logo on the right breast and a pocket on the left. Call sign and name (in blue) to be embroidered over the pocket.
Circle size M, L, XL _____@ $26 each; XXL_____@ $28 each = $_____
Name and Call sign (Print clearly) _____

Item No. 3 - **PVRC cap, blue with silk-screened PVRC logo. One size fits all.**
Quantity _____@ $8 each = $ _____

Item No. 4 - **PVRC Coffee Mug , white, with three color PVRC logo and call sign (set in red Helvetica , bold type) on both sides of the mug. The mug is microwave and dishwasher safe. (We must order a minimum of 24 mugs, so we don't order them very often. Don't miss this chance!) Can be ordered without callsign.**
W/callsign _____@ $13 each; w/o call sign_____@$10 $_____
Call sign (Print clearly) _____

Item No. 5 - PVRC Lapel Pin. One inch diameter with PVRC logo in three colors. Silver back and pin clasp.
Quantity_____@ $5.00 each = $_____

Delivery/ Shipping and Handling
All items can be picked up at my home or, with advance notice, at a regular club meeting, at no cost. If you want items shipped to you, the charges for UPS delivery are as follows:

Mugs: $4 each x _____quantity = $_____
Lapel Pins: $ 2.50 each x _____quantity = $_____
All Other Items: $5 for one item, $8 for two or more items, including pins = $_____

TOTAL FOR ITEMS ORDERED $_____
TOTAL SHIPPING AND HANDLING $_____
GRAND TOTAL (Check for this amount enclosed) $_____

Make checks payable to Brian E. Bayus, and mail along with your order form to:
Brian E. Bayus, N1KC, 2521 Heathcliff Lane, Reston, Virginia 20191-4225
Any questions: call me at 703-264-1180, or send an email to: n1kc@arrl.net.
I PLAN TO CLOSE ORDERS IN MID OCTOBER, SO DON"T DELAY. (Please print)

NAME:_____ CALL:_____

ADDRESS:_____

CITY_____ STATE_____ ZIP_____

PVRC REFERENCE PAGE Please send corrections to the editor. October 2003

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VP-South	K2AV	Guy Olinger	919-362-9461	k2av@contesting.com
Secretary	W2GG	Bob Dannals	410-472-2004	w2gg@arrl.net
Treasurer	WR3L	Dave Baugher	410-DX1-WR3L	wr3l@arrl.net

Trustees: K3MM KE3Q N3RR N4ZR W4MYA W4ZYT N4AF K4IQ ND3A W3PP N1KC

PVRC Charter Members (* =SK) W3GRF*, W4AAV*, W4KFC*, N0FFZ*, W4LUE*, W7YS, VP2VI/W0DX*, W3IKN, W4KFT

PVDXSN Packet Network

W3LPL	Glenwood MD	145.590, 441.250	W3IP	Crownsville MD	145.570
WR3L	Baltimore MD	145.610, 440.950	N3RR	Rockville MD	145.510, 441.325
K3SKE	Frederick MD	144.930, 441.125	W3YOZ	West River MD	144.910
W3TOM	Acokeek MD	145.770	N1WR	Lusby MD	145.690
N4OHE	Mt. Weather VA	145.710, 446.025	NE3H*	Harrisburg PA	144.970
W3BD	S. Mountain PA	145.630	N4SR*	Woodbridge VA	145.630
W4XP	Bull Run Mtn. VA	144.990	K4JA*	Callao VA	145.090

The system is sponsored by the Potomac Valley DX Spotting network except those marked with an asterisk are independently funded by each SYSOP.

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

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, k3di@arrl.net. Send your inputs to him.

PVRC MEETINGS

Central Region -- Regional Coordinator Brian McGinness N3OC 301-924-1712 n3oc@wirelessinc.com
Meetings are always the second Monday of each month, except June, July and August. Meetings alternate between MD and VA locations. January, March, May, September and November are in Temple Hills, MD at the Church of the Nativity. February, April, October and December are at the Patrick Henry Library on Route 123 (Main St.) in Vienna, VA. Pre-meeting dinner get-togethers are held at Topolino's Italian restaurant on Old Branch Ave. before the MD meetings, and at the Outback Steakhouse on Route 123 before the VA meetings, usually around 6pm. Talk in is usually available on the 147.00 repeater.
Northwest Region -- Regional Coordinator Bud Governale W3LL 410-666-9189 w3ll@arrl.net
Meets monthly on the third Tuesday. Dinner around 6pm, meeting at 7pm at the City Buffet, 1306 W. Partick St., Frederick MD, located to the rear of the shopping center behind Mountain View Diner.
North Carolina Region -- Regional Coordinator Jim Price WW4M See http://www.pvrcnc.org .PVRC/NC meets the first Thursday of each month, September through May, with an additional meeting in April at the Raleigh hamfest.
Tidewater Colony -- Contact W4ZYT 757-457-5181 or email w4zyt@exis.net for additional info.
Meeting concurrent with the Virginia DX Century Club at Ryan's Steakhouse, on Battlefield Blvd. In Chesapeake, VA. Take the Battlefield Blvd South (VA 168) exit off I-64. Meetings are the third Tuesday of the month around 6:15-6:30pm.
Northeast Region -- Regional Coordinator Dave Baugher WR3L 410-DX1-WR3L wr3l@arrl.net
Eastern Shore DELMARVA Region -- Dallas Carter W3PP 302-875-0550 Ludal@dmv.com
Southwest VA Region -- Regional coordinator Mike Barts N4GU 540-641-1626 n4gu@vt.edu
Meets Sept-June. Meetings are at the Roanoker Restaurant in Roanoke, VA dates vary, contact N4GU for latest info.
BWI Region -- Contact Ike Lawton W3IKE 410-263-2830 or Howard Leake W6AXX 410-465-7008 w6axx1@starpower.net
Weekly breakfast Weds. 7am at Basil's Deli Port (410-850-4333) on Elkridge Landing Rd 1/4 mile south of Wintergreen Rd.
Over-the-hill Lunch -- For info contact Ben Shaver AA4XU 703-534-4740 or Bill Leavitt W3AZ 301-292-5797.
Meetings are held monthly at three locations: Falls Church VA at the Parkview Marriott, Oxon Hill MD, and Beltsville MD. Meeting schedules are available by telephone or email. All are welcome.
Pennsylvania Region -- Steve Gutshall K3TZV 717-763-0462 k3tzv@paonline.com
Rappahannock Region -- Steve Bookout NR4M nj4f@erols.com or Larry Schimelpfenig K7SV k7sv@va.prestige.net
Woodbridge Region -- Jack O'Mara W4NF 703-791-3302 (h) or 703-739-7636 w4nf@comcast.net and Cliff Deel W4CE 703-491-0841 W4ce@aol.com
Central Virginia Contest Club -- CVCC Pres. Roy Davis WK4Y 804-741-9315 rdd@i2020.net Monthly meetings 2nd Tuesday each month 6pm at the River City Diner on Hugenot Rd (dinner) and 7:30pm at the First Mennonite Church on Staples Mill Rd, Richmond VA (meeting). Talk-in on 145.43, PVRC regional coordinator W4ML.
Southern MD Region -- Barry Shapiro WR3Z 301-862-2466 shapirobj@navair.navy.mil meets at N1WR's home.

Shenandoah Region
Bill Hinkle KV3R 304-567-3138 kb3aug@juno.com

Carroll County Region
Jim Nitzberg WX3B 410-374-9233 Nitz@selectsa.com

Laurel Region
Pud Reaver W3YD@arrl.net Laurel Region meets concurrently with the Laurel Amateur Radio club at the first LARC meeting of each quarter.

September WR3L open house Baltimore MD

December 8 PVRC annual holiday dinner, Olive Garden, Tyson's Corner VA 6pm.

5 Million Club Competition Events
January ARRL VHF Sweepstakes
January CQ 160m CW
February ARRL DX CW
March ARRL DX SSB
March CQWW WPX SSB
May CQWW WPX CW
August 9-10 DARC WAEDC CW
September 13-14 DARC WAEDC SSB
September 13-15 ARRL VHF QSO Party
October 25-26CQWW SSB
Nov 2-3ARRL Sweepstakes CW
Nov 15-16 ARRL Sweepstakes SSB
November 29-30 CQWW CW
December 5-7 ARRL 160m
December 13-14 ARRL 10m Contest

Hamfests (thanks to Glenn, K3SWZ)

September 20	Allentown, PA
October 4	Lancaster, PA
October 11	Carlisle, PA
October 12	Wrightstown, PA
October 19	Sellersville, PA
October 26	Westminster, MD

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- built in CTCSS/DCS • TX 160-10M, 6M, 2M, 440
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- CTCSS/DCS built-in

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