

Official Journal of The Society of Midwest Contesters

Volume XVI Issue I I

February 2008

When Will 15m and 10m Be Back?

By Carl Luetzelschwab K9LA

With the first sunspot of Cycle 24 observed on January 4 of this year, contesters (and DXers, too) are wondering when 15m and 10m will be back with consistent F2 propagation. Using contest results in conjunction with a prediction of Cycle 24, we can estimate when this is likely to happen.

But right off we have a problem. There is not a single consensus among scientists on the magnitude of Cycle 24. Members of the Solar Cycle 24 Prediction Panel were split on Cycle 24's magnitude – either it will be an above average cycle or it will be a slightly lower than average cycle. These two predictions are shown in Figure 1.

The prediction of an above average Cycle 24 gives a maximum smoothed sunspot number of 140 (plus or minus 20) at the end of 2011. The prediction of a slightly lower than average Cycle 24 gives a maximum smoothed sunspot number of 90 (plus or minus 10) in mid 2012. Note that we may know which prediction is most likely in early 2009 based on the rate of ascent.

(Continued on page 5)

Upcoming Contests

NCCC Sprint	Every Tuesday	0330Z-0400Z
Minnesota QSO Party	Feb 2	1400Z-2400Z
NA Sprint, CW	Feb 3	0000Z-0400Z
CQ WW RTTY WPX	Feb 9-10	0000Z-2400Z
NA Sprint, SSB	Feb 10	0000Z-0400Z
ARRL School Club Round	dup Feb 11-15	1300Z-2400Z
ARRL Inter. DX, CW	Feb 16-17	0000Z-2400Z
CQ 160-Meter, SSB	Feb 23-24	0000Z-2359Z
NA QSO Party, RTTY	Feb 23-24	1800Z-0600Z
ARRL Inter. DX, SSB	Mar –2	0000Z-2400Z
NA Sprint, RTTY	Mar 9	0000Z-0400Z
Wisconsin QSO Party	Mar 9-10	1800Z-0100Z
CQ WW WPX, SSB	Mar 29-30	0000Z-2359Z

Low Band Receive Antennas for Limited Space

By Gary Breed, K9AY

On the low bands (mainly 160M and 80M) being able to hear well is a challenge. The challenge is greatest when you have limited space. Often, that limited space is a city lot or suburban neighborhood, where the ambient noise level includes lots of "civilization crud." Transmit antennas are typically some type of inverted-L, dipole or random wire, all of which are nearly omni-directional. To improve the signal-to-noise ratio of incoming signals, some sort of directive receiving antenna is required, enhancing reception in the desired direction and providing some degree of rejection to signals and noise coming from other directions.

(Continued on page 6)

D

The Black Hole



The Black Hole is published monthly, September through June, by The Society of Midwest Contesters. Permission for use of the materials is hereby granted on the sole condition that credit is given to the source of those materials.

> **EDITOR** Brian Maves, K9QQ

Material for **The Black Hole** should be forwarded to:

k9qq@arrl.net

Membership in **The Society of Midwest Contesters** is open to all persons with a bonafied interest in amateur radio contesting. The club doesn't collect annual dues, but instead funds everything through member donations. For more information contact one of the following officers:

BOARD

Pat Barkey, N9RV Jerry Rosalius, WB9Z Mike Wetzel, W9RE Scott Neader, KA9FOX Kevin Kaufold, W9GKA Zig Markowski, KM9M Chad Kurszewski, WE9V Paul Gentry, K9PG Mark Obermann, AG9A Ralph Bellas, K9ZO

SECRETARY/TREASURER Zig Markowski, KM9M

CONTEST ACTIVITIES COORDINATOR Vacant

AWARDS COORDINATOR Chuck Schneebeli, KI9A

SMC Needs Your Financial Support

As one of the top contest clubs in the nation, we continue to sponsor plaques for a number of major contests including Sweepstakes, ARRL DX, CQWW, and CQWPX, as well as make monetary donations in the interest of promoting radio sporting.

A few years ago we decided to eliminate the formal dues of \$10 per year, and instead maintain funds through member donations. We encourage all members to consider making an annual donation to the club. Your generous donations allow us to continue to expand our support of radio sporting.

You can make your donation two ways:

1. Send a check, money order, or cash to:

Zig Markowski - KM9M 50 E. Eureka Drive Lemont, IL 60439-3970

N9OH

Steve

SOCIETY OF MIDWEST CONTESTERS

Order

Today!

WD9DCL DAVEY PATTON

2. Use Paypal and email your donation to dues@w9smc.com.

W9SMC

Official Callsign of The Society of Midwest Contesters

SMC Web Page: http://w9smc.com

SMC Stuff

To get your SMC stuff, see the last page of the newsletter or visit the SMC website, http://w9smc.com/merchandise.htm



VHF Column - On January and Beyond

By Kevin Kaufold , W9GKA

Another January VHF Sweeps has come and gone. This one was bitterly cold, with overnight temperatures in the minuses, and day temps in the single digits in many areas of the SMC service area. This substantially reduced rover activity, and wiped out all portable locations. Band conditions were flat to bad throughout the contest, and noise was a persistent problem in many areas. Football games reduced noticeably reduced operator activity, and the NAQP SSB weekend overlapped with the contest on Saturday. All in all, a pretty typical January VHF contest!

In spite of the problems, we had a fairly good turnout. Point totals were tiny at times, but what matters is that we were out there, trying. Since we are spread out throughout the circle, many of our stations could not hear each other. Even the most powerful had difficulty going more than 200 miles on 2 meters, at times. I was impressed there were so many SMC members and others on the air inside the circle. Here is a station recap.

Bob, K2DRH worked through the noise to post over 160,000 points. Even though Bob thought he had a miserable score by the end of the first day, he ended up almost doubling the next person in the SOLP (at least in early reports on 3830). Bob had good success with WSJT, and did manage to work some decent distances off and on during the contest.

Another shining star was K9NS, who once again was in the Multi-Limited. AA9D noted better propagation than others. I guess that is what a great antenna system and experienced operators can do, work the signals that others can't even hear. The group ended with 191,000 points. This will most undoubtedly put them in contention fro another national title.

Many others members were in there, as well. Jon, WO9S, ran on four bands and made many schedules, for a total of 10,251 points. Given the poor conditions, that might put him pretty high up in the Division! Gene, N9TF, ran PT around kitchen remodeling. KX9X worked from FN31. Somehow, we really did not expect to hear Sean on from Newington, but it was good to know he was in there. Kevin, KG9IL, hit over 5,000 points from his new set-up (more on Kevin, below). Mike, KB9WQJ, made some contacts, putting up with man-made electrical noise. Wayne, AA9DY and his XYL, KC9BLP made a few contacts. Wayne was scheduled to run the NAQP on Saturday.

(Continued on page 7)

CQWW CW 2007 from El Salvador YS/K9GY

By Brian Maves, K9QQ

It all began in mid-September 2007 with a review of North American DXCC countries versus the planned WW CW operations list. There were already a few planned operations from The Bahamas (my usual WPX CW place). The goal was to find a place where I'd be the only one on and therefore be the only one providing the multiplier. It's a similar approach I use for WPX CW. Although in WW CW the multiplier status is more important since there are tons of prefixes in WPX.

The first obstacle was to convince the XYL to let me get away over the Thanksgiving weekend. At first she was not interested in the idea. We eventually negotiated a deal to let me go. Sure helps to not have any kids involved in the family scene. Also my sister is located in MN and my Dad in AZ so there was no family holiday commitments.

One day in looking over the NA DXCC list and looking at the ARRL website...I noticed that El Salvador (YS) was an IARP country. Hopefully the hoops to get a license would be minimal. There had been no YS activity in WW CW over the past couple of years. An e-mail to Francisco YS1FAF about licensing under the IARP resulted in a favorable response. The ARRL issues an IARP license (\$10 regular, \$20 fast service)... Once the IARP permit from the ARRL was in hand, I scanned it to Francisco who issued a permit to operate in El Salvador as YS/K9GY. Cecilia (a lady at the local gym here in Illinois) was from El Salvador and was going to visit family for three weeks in Oct/Nov 2007. Cecilia dropped off the \$10 to Francisco for the YS permit when she was in San Salvador on her

(Continued on page 8)



Member Profile: KM9M

By Jerry Rosalius, WB9Z and Howard Dybedock, AK9F

After a lengthy hiatus because of business and personal pressures, we're glad to announce the resumption of the popular Member Profile series in The Black Hole. This issue, we'll be talking with Zig Markowski, KM9M, from southwest suburban Lemont, Illinois, who is also the SMC Secretary-Treasurer.

SMC- Zig, you have done a wonderful job re-doing and updating the membership roster of the SMC. I want to thank you behalf of the SMC membership for all your hard work and time so far. For those that do not know, Zig has volunteered to take over the job as secretarytreasurer, from NA9D. I want to personally thank Jon Ogden NA9D for his years of service on behalf of the SMC membership. Zig, I really have no idea how much time you spent bringing the SMC membership roster up to date. I know it was a LOT; could you just give us a rough estimate?

KM9M- Thanks Jerry, I'd like to thank Jon NA9D too. The roster update spanned over a couple months. To be more accurate, it is still a work in progress. Although the corrections have really slowed down the past 4 or 5 months, I try to update the master roster I keep within 24 hrs of getting a new member's info, or an emailed notice of a change or correction. Approximately every 2-3 weeks (if any changes are received) I send an updated version to the Directors and Brian, K9QQ. (Keeper of the web page and Blackhole author) As far as the Directors know, it is pretty close right now with the information we have on hand. My last request on the email reflector for members to check the web page produced 40+ changes or corrections.

SMC- Did you have any help?

KM9M- Absolutely! The 2 biggest contributors were KK9K and NA9D. Ron, KK9K had an extraordinary amount of information in Access he put together for SS a couple of years ago. Jon sent me the SMC roster, and member's info that had yet to be keyed in. I also received help from many of the SMC members....some in the Black Hole, some that have moved away. I appreciate everyone that provided information on the missing. Every SMC'er can continue to help this work in process. If you change your call, address, email address, let us know. The best way is email to me at: km9m-zig@comcast.net

SMC- Zig, how about a little background information on yourself? What got you interested in radio and how long have you been licensed?

(Continued on page 12)

Learn Propagation to Improve Your Contest Score

By Ralph Bellas, K9ZO

Ed. Late last month, Bill, W9OL, posted a note on the reflector relating some analysis on his contest logs which showed what appeared to be patterns in the stations which reflected relationships between time and geography. It inspired Ralph to write the following based on his years of experience. We can all learn something from it.

During times in my life when I had more free time, I was very consistently on the bands and got to learn the regularity of conditions. Of course, there was variety and you never knew exactly who would be on. That's the beauty of propagation! For instance, there is a 10 meter long path opening over South America to Asia. There's also an opening to Scandinavia in the late afternoons after you would expect the band to be dead, or open only to South America. The long path to Australia, pointing east before sunset is magical. During sunspot highs it is fascinating to hear Africans, then Australians. On one occasion I recall it extended to New Zealand, then Hawaii, then California. At sunset the band opened to California as normal via the short path and I was able to work the same station that I had previously worked via long path.

Conditions change depending on sunspot cycle, seasonality, and time of day. There are overlapping patterns including unknown influences that continually add variety to propagagtion. Consistantly, day after day I have been able to work stations during the same narrow time period. There are lots of patterns. When I first got on VHF, if I hustled to get home after work, I could catch a 15 minute aurora opening to the east coast. This happened all the time. Then I got busy with other things, and did not realize that it wasn't a normal thing.

Also watch the pattern of when the guy at the other end can get on the air -- perhaps before work, before dinner, or before 10 pm his local time. When you really chase DX you know when he eats and sleeps. We have a remarkably consistent opening to the western Indian Ocean, but only a few guys are there every day, or we only get a small sample of it during a powerhouse dxpedition.

It really helps to know where the sun is at the other end. When you are on a dxpedition. It's critical to follow the sun and know the geography of a region. Each hour difference in time zone is roughly 1000 miles. If you are on the low bands it will seem that the bands close, but observation of the sun time will tell you that sunrise is sweeping across a lightly populated area and the rate slows, but that's the only time to work a layer of

(Continued on page 11)

(Continued from page 1)

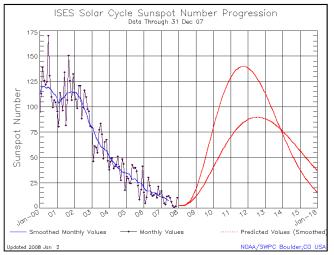


Figure 1 – The two predictions for Cycle 24 from the Solar Cycle 24 Prediction Panel

Now let's look at ARRL International DX Contest results. We'll look at the number of Qs in the single-band PH category for the winning US/VE stations on 15m and 10m from 1980 (the inception of single-band categories) through 2007. We'll make a scatter diagram of the number of Qs versus the smoothed sunspot number for each band. Figure 2 shows the 15m results and Figure 3 shows the 10m results.

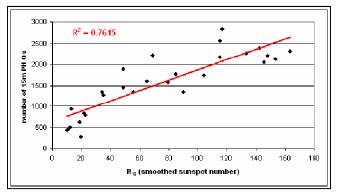


Fig 2 – 15m PH Qs versus smoothed sunspot number

On each plot is the correlation factor of smoothed sunspot number and number of Qs. An R2 value of 0 indicates no correlation, and the data points would be widely scattered about the red trend line. An R2 value of 1 indicates perfect correlation, and the data points would be right on the red trend line. The R2 values seen in Figure 2 and Figure 3 indicate a high degree of correlation between smoothed sunspot number and number of Qs – as expected. Thus we can use this data for our intended purpose with a high degree of confidence.

From Figure 2 we note that the number of 15m Qs picks up

above a smoothed sunspot number of about 40. From Figure 3 we note that the number of 10m Qs picks up above a smoothed sunspot number of about 60. Now we can identify when we'll reach these smoothed sunspot numbers using Figure 1.

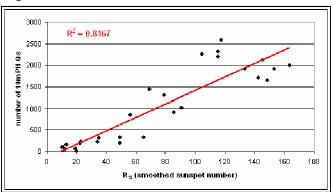


Figure 3 – 10m PH Qs versus smoothed sunspot number

For 15m, we should start to see significantly improved propagation in early 2009 if the above average prediction comes true. We'll have to wait until late 2009 for propagation to improve significantly on 15m if the slightly lower than average prediction comes true.

In a like manner for 10m, we should start to see significantly improved propagation in late 2009 if the above average prediction comes to be. We'll have to wait until late 2010 for propagation to improve significantly on 10m if the slightly lower than average prediction comes true.

As for when the good propagation on 15m and 10m will end, you can work this out for yourself using a smoothed sunspot number of 40 for 15m and a smoothed sunspot number of 60 for 10m during the predicted declining phase of Cycle 24. Table 1 summarizes this entire exercise in terms of the duration of good propagation on both bands.

	Above average Cycle 24	Slightly lower than average Cycle 24
15m	early 2009 to late 2014	1ate 2009 to late 2015
10m	1ate 2009 to early 2014	1ate 2010 to late 2014

Table 1 – Duration of good 15m and 10m propagationfor Cycle 24

In summary, we have another year or so before 15m starts getting real good again, and two years or so before 10m starts getting real good again. All we can do is patiently wait and use the time to improve our 15m and 10m antennas.

Finally, remember this analysis is based on predictions of a process in the Sun that is not well understood. So use the above information as a guideline – not as an absolute.

(Continued from page 1)

Here is a quick overview of the main options for small-size receiving antennas. These antennas represent a range of size, complexity and directive patterns. Some will fit your situation better than others. Hopefully, these comparative notes will help you choose one to use at your QTH.

Let's Review Some Fundamentals

- Noise-reducing properties other than the directive pattern are very limited. For example, a small loop antenna may reduce some electric-field noise souces over a very short distance, but any improvement will be very small compared to the rejection from the deep nulls off the sides.
- Small antennas capture less signal than larger antennas. In some cases, your receiver's internal preamp will be sufficient to make up the difference, but before experimenting with reduced-size receive antennas, I recommend investing in a good high-dynamic range preamp. Some type of "antenna protector" is a good idea, too. Your new RX antenna may be very close to the TX antenna!
- All conducting materials interact with radio waves. Anything larger than 1/10 wavelength can have some interaction with your antenna. Do your best to stay away from house wiring, aluminum siding, wire mesh under stucco, roof flashing and drip edge, etc. Signal intensity (and interaction) dimish in proportion to the square of distance, so moving the antenna twice as far from an interaction problem will reduce coupling by a factor of four. If you must install the antenna adjacent to chain link fencing, it usually works best to elevate the antenna so its bottom is higher as the top of the fence.
- Identify some stable references for before/after evaluations when making adjustments. Nearby "test signals" include ham friends and AM broadcast stations above 1500 kHz. More distant sources include W1AW transmissions (near Hartford, CT), WWV at 2.5 and 5.0 MHz (near Ft. Collins, CO) and CHU at 3.330 MHz (near Ottawa, ON).
- Radio propagation can be highly variable. Allow enough time to evaluate antennas over a range of conditions.

Limited-Space Antenna Choices

Existing antennas -- Your 40M dipole, tribander or other antennas will often hear a little better than the TX antenna. The benefit may be small, but the effort is zero!

Short Beverage -- A Beverage is simple, just a length of wire with ground rods, resistor and transformer. The height can be anywhere from on the ground to ten feet above ground. The length should be 1/2-wavelength or more (270 feet on 160M, 140 feet on 80M). While this isn't a city lot solution, sometimes you can borrow some space along a neighbor's fence or through a little-used area. I've even heard stories of dusk-to-dawn installations along the gutter at the side of a street! Multi-band operation is one benefit of a Beverage. For example, a minimal-size 160M Beverage will perform much better on 80, and is an excellent RX antenna for 40M.

EWE -- Mechanically, the EWE is just like a very short Beverage, although a bit higher off the ground; so you'll need a couple of supports in the right places. Larger sizes can use your rig's preamp, but a smaller-size version will almost certainly need an external preamp. The pattern has one null off the end away from the feedpoint.

Flag and Pennant -- The flag antenna is very interesting. It provides good front-to-back over a wide bandwidth and is not too large (space similar to a EWE). The pennant is just a simplified version of the flag that needs one support, but has some compromise in performance since the loop area is smaller for the same footprint. They are both good options for small spaces, but have two areas of difficulty: 1) They require high isolation from the feedlines; 2) They have lower signal levels than similar-size options like the EWE and K9AY Loop. They will need at least 20 dB of preamp gain.

"Magnetic" or "Shielded" Loop -- The name is not accurate, but the antenna works! The so-called shield does not block anything; its purpose is to help maintain good electrical balance in the antenna. This antenna requires tuning to the operating frequency, so it is a one-band solution unless you implement some type of band switching scheme. When properly constructed and tuned, a small loop like this has a doughnnut-shaped pattern with a deep null to each side (picture the loop as a wheel, and the nulls are along the axle). Adjustment can be tricky and construction needs care, but this antenna is quite viable. Loopstick antennas using ferrite rods behave similarly.

K9AY Loop -- With two loops, center support and switching relays, this seems to be more complicated to build than most others, but remember that it is equivalent to building four EWEs, Flags or Pennants. The primary advantage is that you can quickly switch to any of four directions. A K9AY Loop will have 2 or 3 dB stronger signals than a Flag or Pennant with the same loop area. Like the EWE, it relies on a ground connection, and the ground image increases the level of the captured signals. Although ground characteristics can be a variable factor from one location to another, it

(Continued on page 7)

(Continued from page 6)

is rarely a big issue with typical Midwest soils.

Other Wires -- You may have heard of the "snake" and some other low or on-ground wire antennas. These may work in an individual situation (don't hesitate to give them a try), but they are not predictable or repeatable. If you have more than a city lot to work with, there are numerous reports that a fairly large horizontal loops and a low dipoles can be effective.

More Complex Designs

Hams around the world have had success with adaptations of these antennas. Arrays of two or more elements allows phasing to get better directivity and steer the pattern. The clean pattern of the Flag has led some hams to build rotatable versions. Reversible EWEs have been built. The Pennant lends itself to manual direction changing by moving the pointed end. 6- and 8-direction K9AY Loops have been built.

Electronic help can obtained by using "noise cancellers" like those from MFJ and DX Engineering. These boxes are essentially variable phase shift networks and can be used to combine dissimilar antennas. The resulting patterns can null out a local source of noise, or reduce a distant source of QRM.

Finally, the #1 thing you can do is LEARN! Hams are universally curious about the technology they use, and if you are just starting to learn about the low bands, here are a few places to enhance your education:

- Low Band DXing by John Devoldere, ON4UN
- ARRL Antenna Book
- W8JI's web site: www.w8ji.com
- Archives of the Topband Reflector at www.contesting.com
- A few things on my site: www.aytechnologies.com



(Continued from page 3)

Craig, K9CT, also was in the NAQP on Saturday, returning to the VHF bands on Sunday. K9ZO got on from Bloomington. W9RE worked around NAQP, as well (we have lots of die-hard contesters in the club, regardless of the bands!). Danny, NG9R was also in there. John, K9JK, entered the new limited rover with a big score of 1,400. He might have set the initial division record, too! Zack, W9SZ, got on from home, as it was too cold from his portable spot on the hill in EN50. Bill, K9RWT was also on the air. Others scheduled for the contest included K9GY and W9RM. N2BJ, KC9AMM, and W9RVG also made

some contacts.

Many others that were not club members were also heard and worked from our circle. K9DMW, KC9KOW, W9WLC, N9UHF, AF9J, and W9FZ / R all announced plans to operate either inside the SMC circle or close enough to it. I know Bruce, W9FZ completed with K2DRH in several grids and on numerous bands. Everyone I knew about that were operating inside the circle, I have invited to join the SMC. If anyone picks up a new all that is not in the club, please invite them on the spot and send me a note. I will cordially invite them into the group.

Building Projects. I am updating the VHF Ops List. If you have not already received an e-mail from me, please send me a note on your band capabilities. We are developing a very nice Excel file on everyone's capabilities. I will post it to the web-site when I complete it over the next few weeks. One of the things that struck me as I was going through the list was the extent of projects going on among our members.

For instance, I was astounded when I heard that Kevin, KG9IL not only was on the January contest, but he had 140 QSO's to boot! Last I heard, Kevin had moved across the street, put his antennas in the new garage, and had hit the road on his Harley. He said he would try to get something on again. I thought, really, I still have stuff in my garage from my move, and that was over 10 years ago. Over the summer however, Kevin found his antennas in the depths of the garage and put them up on a tripod on top of the roof. He ended up giving his grid out with 100 watts on 6, 2, and 432 SSB / CW, and 223 FM. He has a homebrew 10G xcvr on the workbench, too. Good job, Kevin.

I also have been most impressed with efforts by Craig, K9CT. He not only bought Lunar Link Amps for the VHF bands, but he has put his array of 4 x 18xxx's on the Moon. See the picture below. Craig also managed to put up 902 and 1.2 as well over the last year, setting a speed record for building a six band super-station. At last count, Craig has worked 43 states on 2 meters (most on terrestrial, I believe), and something like 23 DXCC countries off the moon. This past summer, one of the Cubans reported Craig's signal to be booming into Havana for over 2 hours on 2 meter Es. Now that's a station. Look at the ingenious way that Craig can rotate his 2 meter array towards the moon while still having the upper bands on the same mast.



(Continued from page 3)

trip. The permit was very valuable when coming back through customs on my return flight!

Initially there was a concern about safety within El Salvador. The U.S. State Department website didn't paint a very good picture. This was of some concern for my XYL although I'm an adventurous type...There are some areas of Chicago that aren't too safe either!

At some level the safety concerns were another challenge to be overcome just like the challenge of operating a contest. The Lonely Planet tourist book for Nicaragua and El Salvador was more realistic in it's assessment of the safety risks. It was determined that I would need to practice situational awareness but that most likely there would be no safety problems.

From a preventive medicine standpoint, I checked my vaccinations and found that a typhoid shot was recommended. Malaria was only needed if I was going to more rural areas. For the typhoid shot I found (on the internet) a travel medicine facility near my place of work. In addition, I checked with my medical insurance to verify that I would be covered while in El Salvador...fortunately I was covered.

I had hoped to operate from the club station at CLUB DE RADIO AFICIONADOS DE EL SALVADOR http:// www.georouter.com/cras/ Unfortunately Francisco YS1FAF stated that the station would not be available the weekend of WW CW.

So it was time to find a rental place to operate from... On the internet I found a rental (townhome) in San Salvador that's about 3,000 feet up which was supposed to have clear views to the N & NE. (I later found out there was a volcano in the Northern direction.) The renter's brother lived next door and I could use both properties for antennas.

Initial plan was to be a low-key operation with dipoles for 80, 40 and 20 then a tuner to get to 15 and 10m using 100 watts from FT-857D. The trip's goal was to have some fun and give out the multiplier. The trip also was to be a proof of concept for my dipole expedition theory. In the weeks before the contest I decided to build a 160m dipole to take along... this proved to be a smart move! In looking over the results of the contest, a dipole expedition is ok to have fun but if you want to compete with the big boys you need directional antennas.

A couple of days after I committed to renting the town home, Raymundo YS1RR mentioned a beach house that had a 100 foot tower which sounded great. Although I decided to keep my agreement with the original place and not ruffle any feathers.

I weighted my baggage while packing. That turned out to

be a smart move as the weight limits were enforced during the Thanksgiving holiday (golf case less than 70 #, other baggage less than 50 #). My flight from Chicago to Miami was at 6 am so I left my house at 3:30 am (after waking up at 2:40am!). Weather in Chicago was going to get worse as the day progressed so I was happy to be on an early flight. The flight was full to Miami, whew! The connection at Miami for the flight to San Salvador was great. I had enough time to eat a salad and watch CNN. Flight was delayed about 20 minutes and was only about 25-35% full. Fortunately I was able to sleep for about two hours across three seats.

Upon arriving in San Salvador, I paid the \$10 tourist fee good for ninety days. I was a little worried that my prearranged transportation had not found me yet but kept walking and found him outside the main doors. The taxi driver didn't know much English but then again I didn't know much Spanish, hah! I used the Spanish phrase book to have somewhat of a conversation with him. I did notice a newer BMW while we were driving out of the airport!

We stopped at the grocery store and picked up some things. Mainly water as the tap water there is not good for drinking which is definitely a culture change from always having fresh water from the tap. Arrived at the town home approximately 4pm and there wasn't enough time to put up any antennas. So I set up the radio and accessories in the kitchen. A long wire was strung up to be able to listen. UGH! I guess the barbed wire around everyone's property should have been a clue...the low bands were very noisy! S7 noise on 40m and 80m. There was a pulsing noise that went on every seven seconds which brought the noise up to S9 plus. My guess was it was an electrical fence. Problem is the population is fairly dense in that area so finding the source and doing something about it would not be in the allotted time. Now a little disappointed, I decided that I had a long enough day and it would be beneficial to get some good rest.

The next morning I strung up ¹/₂ of the 40m dipole and turned the radio on hoping that the noise had disappeared. Nope it was still there. So at this point I was starting to get bummed out. Fortunately I remembered Raymundo's offer of the beach house. Eventually we connected via his cell phone and confirmed it was available. Problem now was to get the money I pre-paid just yesterday for the town home! Fortunately the owner was very understanding and returned the unused rental money....whew! Luckily before leaving the town home I did some laundry. I had only taken two days worth of clothes. Doing laundry proved to be a great plan since I wasn't near a washer again.

Raymundo was near the beach so he was going to head back into San Salvador to eat lunch after which he would pick me

(Continued on page 9)

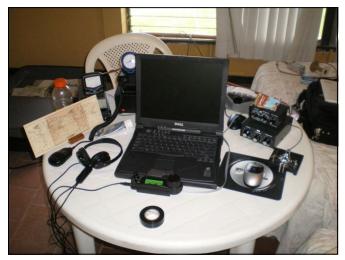
(Continued from page 8)

up. I packed up my stuff in an hour's time! Raymundo and his XYL Christina arrived to pick me up at 2:45pm. After a quick stop for more groceries we stopped at Raymundo's San Salvador home to look over his antennas and radios. He has at least three towers and several beams on his property, which is impressive for a city location! Raymundo's in the process of building a golf course not too far from his beach house so he hasn't been too active with ham radio in a while. He did have some nice plaques on the wall from previous year's activities.



We arrived at the beach house in enough time to have the property manager (Tono) put up the 80m antenna from about the fifty foot level of the tower. It ended up being similar to a horizontally V shaped configuration. It wasn't perfect but I was willing to try it. Hopefully the noise was better (or non-existent out here). Well disaster strikes! The FT-817 receive seems intermittent! I initially thought I had a loose connection on the antenna or coax. Unable to find the problem I got pretty bummed out for two hours or so. Thelma (Tono's wife) made chicken and rice for dinner that was excellent. After dinner I wonder whether the other radio (FT-857d) might provide different results.

The 857d was not intermittent so the 817 must have a problem. Whew glad that problem was solved. As you can see the trip had some roller coaster emotional rides for me. It's an awful feeling knowing that you spent a lot of money on airfare and shelter and face the possibility of not being able to operate. People were counting on me for the multiplier, hah! I did receive several e-mails before leaving on the trip regarding working the YS multiplier.



The operating position at YS/K9GY.

Eighty meters turned out to be great on Thursday (Thanksgiving) night. In 90 minutes I already had approximately 140 QSOs in the log which included QSOs with Europe and Russia. It was great to work a lot of SMCers as that gave me a sense of home. The time in El Salvador is the same as Central time so I called the XYL with the good news about making radio contacts... finally. After the call I tried 40m but wasn't able to raise much. Decided that it was a good time to get some sleep (6 hrs) and put up the remaining dipoles in the morning.

In the morning Tono and I put the 40m and 20m dipoles up about 18 feet between three different palm trees. The problem was trying to locate a place for the 160m dipole. We first tried along the beach with the DK9SQ masts but the antenna drooped too much from the weight of the wire and wasn't high enough. Also the antenna extended into the back of other neighbors' property lines (backyards) which I thought probably wasn't a good idea. Unfortunately we ended up breaking one of the DK9SQ masts while trying to support the 160m dipole on the beach.

Eventually decided to use the 100-foot tower to support the 160m antenna. Tono climbed to the top and using an improvised pulley system we put up the 160m dipole. The 160m dipole needed to clear some palm tree branches and a couple of the (existing) 20m beam elements (no coax connected to it) to get better spacing for the antenna wire. Initial tests were favorable. On 20m I was able to work 87 stations in 49

(Continued on page 10)

(Continued from page 9)

minutes (F,G,KH6, and USA).

At this point I was able to get some food, shower, and a nap (2 hours). There was a party next door with some loud singing but fortunately I was able to block most of it out and get some rest. Most of the homes in this area are used on weekends and for social events.

At 2305z (before the contest starts) OM2VL was loud on 80m (before my sunset) but he wasn't able to hear me. I was able to work LZ1BP on 40m at 2310z. Checked WWV at 2318z (SF=70, A=12, K=1). Worked KL7/N5XZ on 20m at 2319z (Interestingly I did not work zone one in the contest!).

So now the time to decide which band to start on! Initial thoughts were either 80m or 40m...maybe even 160m, hah! Checked 80m which had an S7 noise now and wondered why as Thursday night's conditions were not like that. Checked 160m and had an S9 noise – ugh! Ended up starting on 40m. A little pre-contest operating netted KC1XX, N3RS, NQ4I and DL2DX on 40m.

Checked back on 80m at 03z to find the S9 noise still there! At 04z worked H7/K9NW on 160m through 20m. Now at 05z the noise mystery was solved. A huge thunderstorm was outside. Good thing I did not set up the station outside under the thatch hut! At 0515z it was pouring rain outside. The noise on 160m was S9 plus now. If it wasn't for the storm I believe my 160 and 80 numbers would have definitely been higher.

After the storm passed over I went outside to access any damage. I removed ½ a fallen palm branch near 80m coax. Those palm branches can be heavy! I sure would not want to get whacked over the head with one! Other than that there was no damage.

The electrical outlets in El Salvador tend to be just the twoprong kind. I had brought a three pronged extension cord and also a surge protector. The solution to the problem was to cut off the ground prong from the plug... although the result was a tingling feeling when I would touch the coax connectors.

Before the contest I had reviewed K5ZD's notes on sleeping strategies. Key thing from Randy's article is to be rested going into the contest. Get adequate sleep a couple of days before the contest then get a nap the afternoon of the contest start day. Try to operate the first 24 hours of the contest. Kind of like a Sweepstakes strategy. I think most of the ability to operate for long periods of time is mental. Also I don't use any caffeine

I took a total of two hours sleep during the first 24 hours and a 4-1/2 hour sleep break during the second 24 hours.

So for the whole contest I had 6-1/2 hrs of sleep. I did pretty well there...

Where I got killed was the breaks. I had another 6 hrs of total break time with an average time of 15 minutes each...I didn't figure that out until I looked at WT4I. I classified them as unknown breaks because I wasn't sure whether I might have been on 10m with no answers etc or a real bathroom/kitchen break. I had two known breaks of about 2 hrs total...so total operating (making Qs) time was really around 34 hours. My next trip I'll be watching the amount of time taken for breaks.

At 0653z the power went out for about seven minutes which isn't bad considering the location is more semi-rural etc. During the interruption I had to wonder how long the power would really be out. Not sure if Raymundo had a back up power source or not.

At 1020z I lost power for the second time. This time it was in the middle of an 80m run!

Since it was almost 4:30am local time I thought the ComEd equivalent would not be too quick in fixing the problem. Decided to take a nap and have the light in the room wake me up when the power came back on. It was a good use of the time since the power came back on at 1055z. A quick 30-minute (forced) nap was great!

At 15z Raymundo stopped by for a visit to check out the station etc.

Ten meter opened up and the first six banders started to show up in the log. HC8N and K3LR are among the first to log six bands.

Interesting to me was how loud the JA's were from this location. I'm sure being on the Pacific coast helped a lot, hah! Often the JA's would break through pileups of US stations. Worked VK6HD (zone 29) and four JA's on 80m at sunrise (12z) Sunday morning.

WHOA – what a pileup on 40m Sunday morning (after 80m)...lots of callers! Worked RW0LT (zone 19) on 40m

I should of bought a 10m band pass filter and had the FT-817 hooked up to 10m NCDXF beacons all the time to listen for openings. So a band pass filter is on the shopping list for the next contest-expedition. In addition I also thought that the Force12 Sigma-40xk with remote band switching would have worked well from this beach location. Problem with the Sigma is that the baggage weight would have been even higher.

At one time Jerry KE9I and I QSYed from 80 to 160 at sunrise but we were about 15 minutes too late to make a QSO

(Continued on page 11)

(Continued from page 10)

as the sun had already risen at my location.

Sunday morning (1336z) the bands were not too productive so I began alternating between 20, 15, and 10. On 15m I ended up with only one caller (W4YE). I did note that the ocean was nice and calm at this time. So I decided to take a splash in the ocean, then the pool, and then shower. It was great to feel refreshed but not to lose the time off the air.

More six band QSOs now. Among them are WE3C, W3LPL, and J3A.

I heard V51AS (zone 38) on 10m at 1520z but was unable to get a QSO.

I used the 160m dipole with the tuner for 15 and 10. For some reason I could not get the 80m antenna to tune on 10m.

At 1715z propagation must stink! I listen to WWV and find out that SF=71, A=13, and K=3. The high K sure isn't helping things out!

At 18z I was calling CQ on 20m and reading the El Salvador tourist book since the rate was about 20 an hour... ugh! If I had known that propagation on Sunday would have been so bad I might have stayed up on early Sunday morning and slept during the day!

The contest ends and it's dark outside. Decide that the antenna teardown will begin in the morning. Ended up finishing taking down the antennas about 8 or 9 am Monday morning.

I asked about riding a bike to La Libertad to check it out. It was suggested that taking the bus was a better method. I think there was some concern that the bicycle would be stolen. The next bus wasn't until noon but Raymundo was scheduled to take me to the airport around 11:30am. So a visit to La Libertad would have to wait until the next time.

Raymundo took me to the airport on Monday. Unexpectedly he gave me a hug which was nice. It caught me off guard, so I returned the hug a second time.

I found a nice painting on a postcard size paper at one of the stores in the airport. I used it for the front of my QSLs. I went with GlobalQSL which fills out the QSO data on the QSL cards and mails them out to the appropriate QSL bureau. Ended up getting about 180 direct requests.

The flight from San Salvador to Miami was uneventful. The airport shuffle in Miami was a disaster though. The airport makes you clear customs with your luggage. Customs took about 50 minutes, which was not bad considering how many people were there. Upon attempting to recheck my luggage for the flight to Chicago they informed me that I would need to get re-booked on a later flight since there wasn't enough time (30 minutes) to get my luggage to the plane. The re-booked flight got delayed so I arrived back in Chicago around 12:30am. Unfortunately my seat on the Miami to Chicago leg was right next to the bathroom...Oh well what we do to contest from a DX location, hah!

Post contest analysis results:

Interesting...these are the zones I did not work on any band:

1, 17, 18, 21-24, 26-28, 34, 36-40 (toal 16 zones!)

Zones 3,4, and 5 were 79% of Qs.

Zone 25 were 4% of Qs.

Zones 14 and 15 were 8% of Qs.

Six hours of 100+ Q rate.



(Continued from page 4)

medium sized stations. With disturbed conditions or low sunspots it may be the only opportunity to work certain regions of the world.

Of course, you have to start out by picking the best openings and working the loud and close-in guys first. This enables you to uncover other layers of the onion. Good dxpeditions put in a huge initial effort to just try to work down the pileups in order to become more efficient, and then give the mid and low tier stations a chance, while progressively working longer distances, and staying through less productive openings.

And don't forget the openings that don't seem to make sense at first. Our openings to Venezuela on the low bands follow the sunset. However, if you are a very early riser, it's a good time to catch YV, HK, or PJ as their sun rises, not during the pile-up time at night when they prefer to work europe anyway. The big guns from the midwest have enough firepower to butt heads with the east coast and catch these early openings.

Since I was a medium gun at best, I could often hear stations well before I was able to work them. Generally I was able to get through only during the peak of an opening. This is particularly true when working gray line. Often I could hear guys, but never work them until the actual peak. I learned that my peak lagged sunrise by just a few minutes, and also that the few minutes difference between sunrise across the state made a difference. Having minimal antennas made this significant! By the same token I hear some really cool asian stations on 15 meters during the last 30 minutes of CQWW. I never can, except for an occasional station in

(Continued on page 12)

(Continued from page 11)

China or Korea. Hopefully, I will have better HF antennas some day and this will be the verification that they work.

The big guns always get through. Big guns are able to widen the time slice of an opening and also stretch it farther than an average station could. By being loud they attract casual operators to fill their logs with nice juicy rare DX. The really big guns just open the band before it gets crowded and they sit there all alone for an hour running guys. The consistency you see in the openings means to me that you're likely learning when the peaks are and getting through then.

This low sunspot cycle has also confused my practical experience built up from many years of operating. Who would think that you can work W6 at noon on 40 meters, or that you could not easily work Illinois during daylight hours? That time slot is normally reserved for loud local stations. Ha!

The propagation predictions are so wonderfully accurate and learn this through empirical observations - hours and hours of on-the-air listening. I'm getting on again tomor-



(Continued from page 4)

KM9M- My 1st exposure to ham radio was back around 1968 or so. I was in the Cub Scouts, and one of the dads had a station in the front-hall closet. It piqued my curiosity, but that family moved away and that was that. I started playing with radio in the mid 70's as many did in CB. I wanted more than CB offered. My Elmer, K9RB (then WA9EKA) knew a couple of the guys I hung out with. It started out as weekend coffee or beers, and turned into a year semi-formal Novice class. Although it took me close to a year to get the code, (I really struggled) I was 1st licensed as KA9DON in Feb '79. I went through all the classes of licenses then, testing at the FCC office in Chicago except for my Novice. I upgraded to Extra in the Jan of '82, and received KM9M issued by the FCC in February of '82, and have kept it since.

SMC- Tell us about your "early radio days". Was there anything specific that got you into the hobby and did you have any Elmers?

Camaraderie was a big part of it. I had been off work with a back injury at the time I was 1st licensed . In the evening of the day I received my license in the mail, K9RB, KD9A, KC9U(SK) and ND9K had brought over a Hallicrafters HT-32, Radio Shack DX160, wire, coax, a relay, and a metal box K9RB made into a 120v T/R switch. When they left, I had a 40m dipole between 2 trees on my property, and I was QRV. The DX160 was really a wideband receiver, but it got me on the air. I used an old Radio Shack straight key that I had bought to practice sending CW. The memories of the help I received then remains with me today. I try to help anyone who asks.

SMC- Do you want to mention anyone in particular that was especially instrumental in getting you on the air?

I sure do, and he still mentors me. Rog, K9RB (e-WA9EKA). Many guys helped me get on the air in the early days. Besides K9RB, some of the most involved were KD9A, KC9U, W9IIX, and ND9K.

SMC- I know you operated from the V26B station several times. How did you get hooked up with the V26B gang?

KM9M- Actually, I've only operated from V26B in and around CQWW SSB 2004 and 2007. The V26DX group that was in the process of building a "turn-key" low power contest/DXpedition station had planned on operating CQWW SSB 2004. Mid summer '04 we were advised that the hotel had a new owner. There would be no more ham access allowed to the roof, and the owner gave us 5 days to get the antennas off the roof, (an Opti-Beam OB12-6 and a F-12 C4) or they would be torn down. Doug-W3CF (dreamer of the V26DX experience) contacted a couple of the local V2 hams, and the antennas were removed. Knowing V26DX was dead, I was really bummed out. I was already booked for the flight and room. Doug, knowing this, contacted the V26B guys (mostly FRC'ers) he knew, and asked if they had the need and/or room for a 'lil pistol that could run and handle the piles... I got invited to join Team Antigua. I hope to begoing back to V26B for CQWW SSB this fall. (CW would be a nice change, but different group of guys)



The V26B QTH

(Continued on page 13)

The Black Hole page 12

(Continued from page 12)

SMC- Have you done any other Contest Expeditions or DXpeditions?

I did CQWW SSB in 2003 at V26DX with W3CF, KD3TB, KD3RF, V21DM. I did ARRL DX SSB in Mar 04 at V26DX with W5OV,(then N5NJ) WX0B, and DF2BO (Tom, owner of Opti-Beam). We received a certificate for 3rd Place World M2. This was with 100w, and one set of slopers for 80/160. W5OV termed this operation "the Swan-song of V26DX" in a write-up on contesting.com, as it was the last contest operated from V26DX.

DXpedition wise, I've only activated my V26CW call around the contests the couple of years I made it to Antigua. I've been invited elsewhere, but just hadn't been able to work it out. Everything happens for a reason. The way I look at it, I never thought I'd be DX, or running stations sitting under a stack, or operate a contest from any Zone other than 4. Those memories I have will be cherished forever. I think of how many hams that have never been, or never will be DX. I consider myself most fortunate for the opportunity to do so.



Zig operating V26B during Antigua Day.

SMC- What are your favorite contests?

KM9M- Any contest from the Caribbean, but I really enjoy CQWW from there. It really was a PITA in ARRL DX to listen to U.S. run EU and we were pretty slow, even S & P. But our time came. From home, I like WW, WPX, and now that I'm getting more proficient with the CW speeds/ exchange, SS CW. I haven't gotten close to grasping the Sprints. The Thursday night practice runs hosted by NCCC are at a very bad time for me.

SMC- What are your favorite bands/modes?

KM9M- Any band that's open, and CW by far my favorite mode. I just don't generate enough of a signal from home to do any good on SSB. Hope to try RTTY one of these days.

SMC- Many contesters also chase DX. Are you a serious DXer?

KM9M- I'm probably a middle-of-the road DX'er. Still struggling at the just under 300 worked mark. I have 8 band DXCC worked (never submitted a card for even the initial DXCC). I spend a lot of time tuning the bands, reading DX reports, etc. I'll wake up early or stay up late as needed to work whatever I need as my schedule allows. I was unsuccessful in working the recent VU7 and BS7 DXpeditions. Not for lack of trying, you just can't work what you can't hear.

SMC- Do you belong to any other Contest or DX clubs?

KM9M- Well, I'm kind of an adopted stepson to Team Antigua – V26B. I do belong to the Metro DX Club. I was a charter member when it started way back in the early 80's, but I drifted away for a while as many do from clubs, and have been back for a few years. Great group of people. Some "Big # DXCC" people there, not many contesters. I have many friends there, and it's nice to have a monthly meeting. We've been evicted from Oak Forest Hospital (meeting place since it started back in the 80's) due to the Cook County budget wars, and the closing of the hospital. So, this group is looking for a stationary home in the Oak Forest area. Current meetings are being held wherever possible.

SMC- Considering the SMC, how can we active members encourage more contest activity within the club?

KM9M- I think we need to set some kind of requirement for members to be active in contests. Clubs like FRC, and others, require members to be active in a number of contests a year. We've tried Emailing members before the SS pushes. Some like it, others resent it. The same with the pledge page. A lot of work goes into both endeavors. Over the past 5 or 6 yrs I've been a SMC member, many volunteers have been asking for score pledges, and trying to stir up the masses to get them active in the contests. I've been very active the past couple years trying to solicit SS activity. In 2007, W9GKA took the stage as trying to rally the SMC masses for SS. More will be coming out over the next few months. These efforts are very time consuming. If someone has a better way of increasing activity, let the Board know what your ideas are. SMC is a contest club....contester's are competitive by nature, ie: antsy. I believe if someone is a member of a contesting

(Continued on page 14)

(Continued from page 13)

club, they should actively contest. If you belong to a DX club, you should actively DX.

SMC- Where do you see the club going?

KM9M- We started last year with a new Board, and shared many ideas. Some have been instituted, others have not. We need to wake SMC up, as it seems to be a slumbering giant. With as many members that we have on the roster, we should be a dominant force to be reckoned with. The Board can do only so much. The members need to take ownership of SMC. Besides sharing in the bliss of winning, ALL SMC'ers should share in its shortcomings or losses, as well as looking for ways to improve activity. SMC can either rise to the top again, or fall to the bottom of the pack. I'd prefer to fight back to the top, but the Board and a hundred or so active members can't do it alone....we need EVERYONE!

SMC- What can the members do to help you?

KM9M- Try to recruit active hams interested in contesting that will support SMC. Getting on the air in contests, especially SS. While Sweepstakes has traditionally been SMC's "main event," we need to rededicate ourselves to the past efforts of the 3-peat. PVRC and NCCC have figured out the numbers game, and operate many stations with different ops. SMC needs to figure out how to make up 8+ million points to get back to the top of the pack.

We also have very real expenses, that require real money to pay: The contest suite at Dayton; sponsoring plaques; helping SMC'ers with expenses when competing at WRTC as a competitor; and the SMC Email service all come at a price. SMC really needs an increase in funding. If we don't, I don't see any way to continue doing all the things mentioned above at current or past levels. We need more of our members to make annual donations. The board and a good amount of members are interested in expanding SMC's contest focus. (Like the major DX contests, etc.)

SMC- Where do you see ham radio in general going now that the FCC has lifted the code requirement? What impact will the "no code" licensing have?

KM9M- Nothing we can do about the FCC eliminating CW, it's a done deal. It's up to ALL clubs to welcome and try to educate the new (and old). Personally, I was against the dropping of CW, but have accepted it (no choice) and chosen to go with the flow. If we do nothing, we have nobody but ourselves to blame if ham radio goes down the pooper. In the time just prior to the change, I heard many prominent Extras acting like idiots in the bottom 25. It wasn't the new guys, nor computer sent CW.

The impact: I see more generals, and no doubt more extras.

If they are ignored, and/or un-Elmered, things will go to hell. We need to get back to peer pressure and selfpolicing.

SMC- Tell us about your station.....equipment, antennas, any special features, etc.

KM9M- No special features. Radio 1 is a Yaesu FT920 with the Inrad switchboards for cascaded cw/ssb filtering driving a QRO HF2000 QSK amp thru a Ten Tec 239B tuner loading the infamous G5RV inverted-V I have at 32 feet. A Microham Microkeyer is currently not connected to either radio, but headed back to #1. Radio 2 is a resurrected Kenwood TS940SAT driving a Heathkit SB1000 amp (AL80B), through a Drake MN2000 tuner, currently loading a 10-40m ground mounted vertical. 3 yagis and a Pro-Sistel rotor await me making some kind of deal with the village where I live. The SO2R box is a SCK II (although I haven't really used it to its potential yet), Two I.C.E. 419A bandpass filters, Paddles by Bencher, Headset is Heil Pro-Set+, and newest footswitch is of the industrial type (used in most 911 centers) suggested and found by K9SD. Older Dell Dimension 4100 running Win ME with 2-19" LCD monitors finishes it off.

SMC- Are you active in any other hobbies or past times?

I love to fish, spend time with my family, play with my two grandsons, my two new granddaughters, and find out grandchild #5 is "under construction. I still follow my kids playing sports (all in their 20's now), and now my oldest grandson and his two new sisters are soccer players. I'd never been to or watched a soccer match prior, nor knew much about it. I will now! If anyone has a "soccer for Dummies" book, mind sharing? As one SMC'er from Southern IL says, "Life is Good!"

SMC- Any comments about wife or family with relationship to your ham radio hobby?

None of my family is licensed. It used to bum me out, but I guess the older I get, the less stuff bothers me. (I have staked claim to my grandkids though.) My wife is much more understanding of the time spent on the hobby, especially contesting. It took a while, but it was well worth waiting for. If I can ever get my RFI issues in our house resolved, It would be all the better (the only remaining sore point of QRO contesting at KM9M).

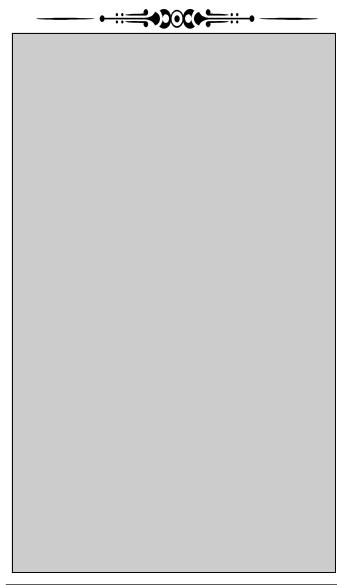
SMC- Please feel free to add any additional comments or thoughts you have about the SMC, ham radio in general, or any particular rants you might have. We'll clean up any particularly offensive profanity... :=)

KM9M- I think a huge benefit SMC could gain from is (Continued on page 15)

(Continued from page 14)

the opening of M/M's... Some for training at first, some competitive from the start. SMC has many station challenged or non-stationed members, besides the members that live outside the circle. Some in this group of members are world-class ops. Granted, SMC doesn't have the number of stations for this that the "coast" clubs have, but I think it is something worthy for the club and the owners of suitable stations to consider. How can we develop Contester Skills when there is no training (Elmering) going on? I'd also like to see an SMC version of Contesters University set up. Maybe given at a couple hamfests, or in a Holiday Inn type setting . Whether our own version, or be it from the DVD sets PVRC sells. This will take people to do....aka VOLUNTEERS, and some funds.

Again, Howard and I want to personally thank you for this contribution to the Black Hole, and for all your hard work on behalf of the SMC. WB9Z & AK9F





2008 Wisconsin QSO Party

March 9, 2008 from 1800Z to 0100Z March 10 (1:00PM CDT to 8:00PM CDT) Note: This is the first day of Daylight Savings Time!

http://www.warac.org/wqp/wqp.htm

Tenth Annual Minnesota QSO Party

Sponsored by the Minnesota Wireless Association

Saturday, February 02, 2008

8:00 AM CST (1400 UTC) Through 6 PM CST (2400 UTC)

http://www.w0aa.org/mnqp.htm

Member/New Member Information/ Update Form Name: Call: Address:	 We need your input for the next 'Hole!! ⇒ Operating stories ⇒ Station construction ⇒ Operating accessories ⇒ Packet and computer hints ⇒ Product reviews ⇒ Plug your upcoming DXpedition ⇒ Your idea here
Phone:	Please consider putting an article together today!



The Society of Midwest Contesters Brian Maves, K9QQ 1322 Engle Creek Dr. O'Fallon, IL 62269

FIRST CLASS MAIL

The Black Hole page 17