

THE BLACK HOLE



ARRL SS Unlimited Team Champs 2000, 2001, 2002

Official Journal of The Society of Midwest Contesters

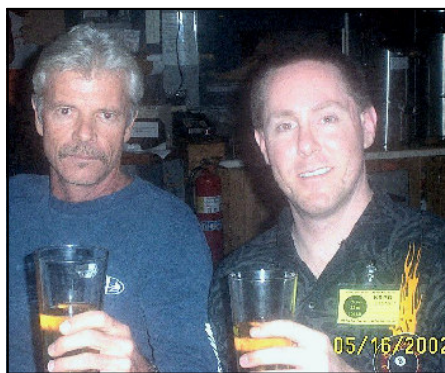
Volume XIV Issue I

March/April 2006

3 SMCers Picked for WRTC 2006 Competition



Mark Obermann, AG9A
Teammate: Dean Straw, N6BV



Paul Gentry, K9PG (r)
Teammate: Mike Gibson, KH6ND (l)



Pat Barkey, N9RV
Teammate: Tim Duffy, K3LR

Cycle 24 Predictions

Ed. A flood of articles appeared earlier this month discussing a breakthrough in predicting solar cycles and providing a forecast for Cycle 24. The following appeared on the ARRL site and provides a good summary.

By ARRL, Bill Sexton, N1IN

NEWINGTON, CT, Mar 7, 2006--The next solar cycle, Cycle 24, will be a year or so late in arriving but will be far more intense than the current cycle now winding down--perhaps as much as 50 percent stronger. That's according to a new computer model unveiled March 6 by scientists at the National Center for Atmospheric Research (NCAR) in Boulder, Colorado. The researchers developed the first "solar climate" forecast using a combination of groundbreaking observations of the sun's interior from space and computer simulation. Key to predicting the solar activity cycle is an understanding of plasma

(Continued on page 3)

SMC Needs Your Support

By Jon Ogden, NA9D

I wanted to give everyone an update on where we are.

We've been running on a dues free format for about 5 years now and it's worked relatively well. Recently though, donations from members have been very slow coming in.

If we want to sponsor members to go to WRTC, sponsor plaques and support other events like the suite at Dayton, the website and e-mail reflector, then we need members to step up to the plate and donate.

If you haven't donated to the club in a while, consider doing so. We have over 600 members on the roster. If every member gave just \$5.00 a year, that would MORE than cover our current expenses and enable us to do much more.

If you, the members, want this club to remain active and participatory, then we need everyone to step up and pitch in. Even if you can only give a few bucks, every little bit helps.

(Continued on page 4)

The Black Hole



The Black Hole is published six times per year 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 bona-fied 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:

PRESIDENT
Paul Gentry, K9PG (847) 819-3000
Paul@k9pg.com

SECRETARY/TREASURER
Jon Ogden, NA9D
na9d@speakeasy.net

CONTEST ACTIVITIES COORDINATOR
Paul Gentry, K9PG (847) 819-3000
Paul@k9pg.com

AWARDS COORDINATOR
KJ Morehouse, W9RM (847) 696-2828
kjm@ProbeElectronics.com

ILLINOIS STATE COORDINATOR
Gary Hornbuckle, K9MMS (630) 377-0884
k9mms@aol.com

INDIANA STATE COORDINATOR
Greg Clark, K9IG (317) 535-0282
k9ig@k9ig.us

IOWA STATE COORDINATOR
Dave Andersen, K0RX
k0rx@uiowa.edu

MISSOURI STATE COORDINATOR
Steve Lufcy, K0OU
k0ou@comcast.net

WISCONSIN STATE COORDINATOR
Gary Sutcliffe, W9XT (414) 644-8876
ums@nconnect.net

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 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:
JON OGDEN, NA9D
905 SURREY LN
ALGONQUIN IL 60102-2058
2. Use Paypal and email your donation to dues@w9smc.com.

W9SMC

Official Callsign
of
The Society of Midwest Contesters

SMC Web Page: www.w9smc.com

SMC Stuff

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



Badges

Order Today!

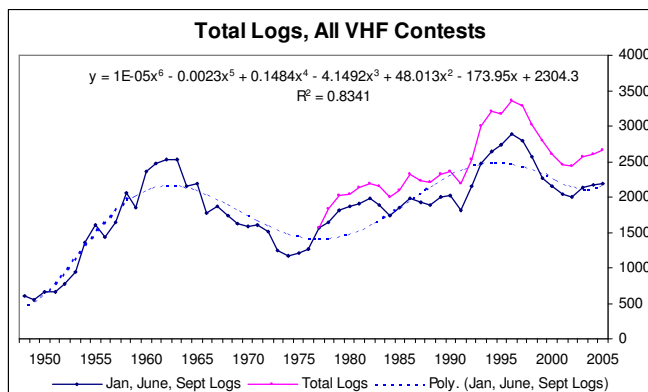
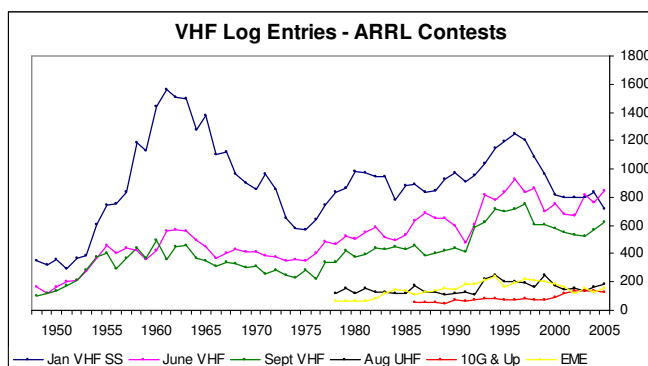


Shirts

2005 VHF Contest Stats

By W9GKA, Kevin Kaufhold

2005 VHF Contest Stats. Final results are now in for all VHF contests occurring in 2005. The January VHF Sweeps was down a bit, and for second time ever since 1948, the June contest had more participants than in January. If the trend continues, June may become the most popular VHF contest. The September VHF also saw an increase in log activity, as well. We seem to have turned the corner in VHF contest activity, with 2002 representing the bottom of this cycle. The following graphs show some interesting trends. Note the two great peaks of log activity – the first in the early 1960's, and the second in 1996. In earlier articles, I noted that the first peak was induced by the large influx of newly license novice and technicians. The more recent peak was without doubt generated by the huge inflow of no-code technicians starting in 1991.



On the club competition statistics, note that June and September continues to rise in popularity, with 40+% of all participants now submitting club entries in September, and somewhat less in June. It is rather amazing that June and September has so quickly caught up in club activity. In fact, the total number of club logs and participating clubs is ap-

(Continued on page 4)

(Continued from page 1)

flows in the sun's interior.

"We understood these flows in a general way, but the details were unclear, so we could not use them to make predictions before," said NCAR's Mausumi Dikpati, who published a paper on her research March 3 in the online edition of Geophysical Review Letters. Magnetic fields are "frozen" into the solar plasma, so plasma currents within the sun transport, concentrate and help dissipate solar magnetic fields, Dikpati explained. She said the new application utilizes innovations in direct study of the sun's interior as well as historical data on which previous forecasts have depended.

The new technique of "helioseismology" allows researchers to see inside the sun. Helioseismology traces sound waves reverberating inside the sun to build up a picture of the interior, similar to the way ultrasound technology can create a picture of an unborn baby. The new model, known as the Predictive Flux-transport Dynamo Model, has simulated the strength of the past eight solar cycles extending back to the early 1900s with 98 percent accuracy.

If proved correct the forecast offers a sort of bad news/good news scenario for Amateur Radio operators, but not all solar scientists agree with the newest prediction. NASA solar physicist David Hathaway has declared that Cycle 23's solar minimum already has arrived. Nonetheless, Hathaway, who was not involved in the Dikpati study, says he is excited about the new model.

"It's based on sound physical principals, and it finally answers the 150-year-old question of what causes the 11-year sunspot cycle," Hathaway said.

Hathaway says his own research concurs that Cycle 24 will be more intense than Cycle 23. However, he predicts the next solar cycle will begin late this year or early next year rather than a year later. He points out that historical data suggest that the more powerful cycles begin earlier rather than later.

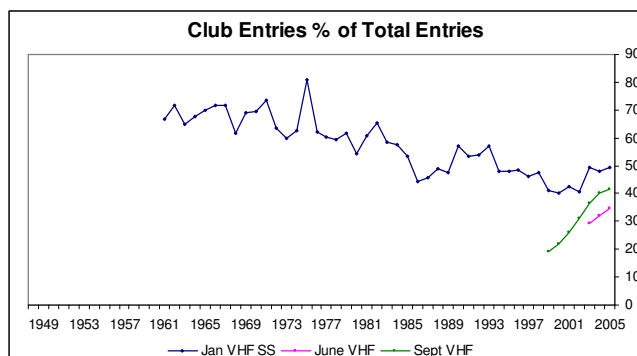
Under the model developed by Dikpati and her colleagues, the poor HF propagation of Cycle 23's terminal stages won't reverse course until late 2007 or early 2008, and Cycle 24 won't peak until 2012. But higher intensity normally means more and longer HF band openings--with the exception of solar storms. As the sunspot cycle bottoms out, however, conditions can be more favorable for VHF and UHF operation.

For public utilities and satellite operators, the new model's prediction regarding solar storms is mostly bad news. Depending on their intensity, solar eruptions--with their powerful releases of radiation--can disrupt power grids on Earth and satellite operations in space, including communications

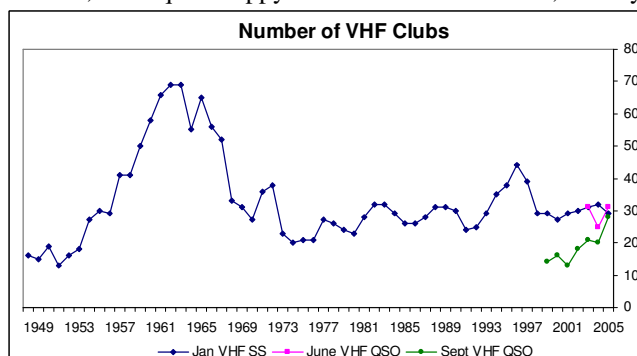
(Continued on page 4)

(Continued from page 3)

proaching equality between all three contests. This suggests that club members from January have probably been participating all along in the other VHF events. Now that club competition has been authorized in June and September, club activity has quickly risen in these two contests, too. It does appear that the newly arrived club competition has shored up participation levels in both June and September.



Overall, I am quite happy with these recent trends, as they



show more participation and diversity in VHF contesting. Gone are the days in which the January VHF club competition was the only big VHF event of the year. Even the August UHF has seen a surge in the last two years, with Northern Lights sponsoring their "Rovermanias". The "big three" contests may all have intense club rivalries going forward: Mt. Airy continues to dominate January in the unlimited while Rochester has the top spot in the medium; PVRC and SMC have been fighting it out in June; and PVRC and NEWS have been battling for superiority in September.

2005 SMC VHF activity. SMC participation was up this year in both June and September, so this is a very good sign for our club. June appears to be the one contest that SMC members can really shine in, as the HF skills and interest of our SMC members bear fruit in 6-meter band openings. We may be in the "Black Hole" for the HF contests, but the Midwest makes an "ideal hole" for both 6 and 2-meter activity in the summer. In the early 1990's for instance, WB0DRL in Kansas was known to point two

(Continued on page 6)

(Continued from page 1)

If you do wish to donate, you may do it one of two ways: Check, Cash or Money Order:

Jon Ogden
905 Surrey Lane
Algonquin, IL 60102-2058

(Put SMC on the bottom left corner of the check so I know what it is.)

PayPal: dues@w9smc.com You don't need to be a PayPal member to donate via PayPal. You can use a credit card at the site.

The suggested annual donation is \$10.



(Continued from page 3)

links and GPS. Previous forecasts for Cycle 24 had suggested a significantly milder intensity.

A next step for the NCAR researchers will be to develop an advanced model that can give advance warning of individual solar storms, says Richard Behnke of the National Science Foundation. NASA's Living With a Star program and the National Science Foundation funded the research.-- information from NASA, NCAR and news reports was used in developing this report



A completely spotless sun, like this one on February 10, 2006, is guaranteed to keep everyone on 20 meters during the contests. We're approaching the bottom of Cycle 23 and beginning what scientists believe will be a much more active Cycle 24.

Casual QSOs

By Brian Maves, K9QQ

Recently Jim, KG0KP, asked a great question on the reflector:

"If a person not actually IN a contest works a few people who ARE in a contest but doesn't send in any logs, what is the effect on those contesters he worked? Do the contacts count against him? Do the contacts count for him? Are they ignored?"

If it wasn't for casual operators getting on and making a few contacts in the "contest du jour" every weekend, this hobby/sport would certainly be less appealing, and more arduous. So great question, do casual ops hurt you, or help you in a serious contest effort? Here are a few of the responses.

"My experience in several contests is that if the call you worked doesn't submit a log, BUT did work other stations in the contest who do submit logs, the log checking software will give credit for the contact as multiple other stations have worked the same call. If the call you worked is not worked by any other station submitting a log it will probably be disqualified. That's why I always try to work at least a few stations in a state QSO party even if I'm not in the contest and won't be submitting a log. If multiple stations report my call in their log they will probably all be given credit for their qso."

"In the circumstances described, there is no penalty."

Even if someone works a single station and does not submit a log, that is called a "Unique" but it does not incur a penalty. The only time a penalty could apply in this circumstance is if a log has an extraordinary number of uniques. That will cause the log checkers to take a closer look and could result in penalties.

FWIW, almost all logs logs with any significant number of QSOs, will always have uniques.

Log checkers want as many logs as possible. That permits them to cross-check more QSOs. For that reason, I always encourage those "not-in-the-contest" stations to send in a checklog."

"In major contests, uniques... a unique is when you are the only person in the contest who SUBMITTED a log who has that call in it...are NOT removed."

If you have a very high percentage of uniques, i.e. more uniques than those who made a similar number of contacts that you did, your log will receive extra scrutiny, even to

the point of the contest scorers contacting people who have the calls of the uniques in your log to see if they operated that contest. If a high number of these people were not in the contest or did not work you if they were, you will be disqualified. This has happened. In the 80s some well known stations padded their logs with calls from the callbooks. Computerized log checking has effectively ended this method of cheating. Uniques are NOT removed because there ARE people who get on and only make one, two or a handful of QSOs, sometimes just to work their friends, or to work a rare DX station. It has been estimated that about 50% of uniques in high volume logs are busted calls, but they are not removed and the station gets credit for them. It would be too labor intensive to check out each unique in a large volume log so all are let go."

So what is the official answer — at least from the two major contest sponsors?

On the CQWW UBN site at www.cqww.com, the committee states definitively in the first paragraph, "NO CREDIT IS REMOVED FROM YOUR LOG SIMPLY BECAUSE A CALLSIGN IS UNIQUE(U)." So if a casual op works you, and you alone, or works you and a few stations but doesn't send in a log, you won't lose that QSO just because it can't be verified by another log. I encourage you to read this site to understand the CQWW log checking process better. The bottom line of the CQWW philosophy is, "The penalty system is deliberately implemented to encourage accurate operating.... It is intended to strongly discourage logging of callsign guesses."

The ARRL also has a rigorous long checking process, but the ARRL website doesn't provide any detail. I found a brief summary by EI5DI, where he describes it as a two-part process. First, they independently check each log against an up-to-date database of country/prefix references. Second, they combine and cross-check all the logs to disallow QSOs, and impose penalties, where logs don't match. Based on the second check, not having a log from a station would probably cause a QSO with that station to be flagged as a "unique" and a potential problem. However, ARRL Contest Chairman, N1ND, is on record as stating, "Unique QSOs are not busted without substantial evidence."

So I think it is safe to say that those much needed, and appreciated, QSOs with casual ops don't hurt you in a contest.

I encourage everyone to learn more about the CQWW UBN reports and ARRL log checking reports (LCRs). They will tell you a lot about how and where to improve your accuracy and operating abilities.

For instance, the UBN report from my V73AZ operation in CQWW told me that instead of sitting in front of a radio for 48 hours straight, my ability to listen and type at the same time might benefit from a nap.

(Continued from page 4)

separate 6-meter antennas in opposite directions just to take advantage of simultaneous openings occurring on BOTH coasts. Also, note that only stations in a very small area in Illinois, Missouri, Arkansas, and Iowa have the capability of working all 48 contiguous states on 2-meters. Most of the SMC is inside that area.

Several SMC members have continued to take the lead as anchors for the club in 2005. Great national scores poured forth from Bob, K2DRH, dominating the SOLP nationally and in the Central Division; Jerry, WB9Z, with great performances in SOHP; Barry, N2BJ, in the SOHP and multi categories; John, K9JK, as a rover spanning many areas in Illinois and beyond; Marshall, W9RVG, in deep Southern Illinois normally running as a multi-op; Zack, W9SZ who has been really polishing up his QRP skills and station; K9RN with some wonderful scores in the multi-limited; and David, WA1MKE, from Indiana putting in top section scores. Several other ops have been developing strong station capability, too. Jon, WO9S has been putting in big efforts in the SOLP; Gene, N9TF is doing nicely both as a multi and in the SO; Ralph, K9ZO is also doing nicely; Sean, KX9X left the area, only to rejoin us, and with some good, solid runs, to boot at K9ZO and his won place. AJ9C is another Indiana station putting some points on the air; W9SE, W9VA, K9JS, AA9MY, AI9L, KG9N, have all been active as well. Eric, K9GY, is rejoining us after spending some time in the NE corridor. And, who can forget the Sullivans, K0PG and K9ILT, with their great rover runs. I only hope that they continue their efforts and not get too discouraged with the recent family rover rule clarification. If I forgot someone's call, I apologize. There have been so many people working the events recently, I am having a hard time keeping track of everyone!

I also want to congratulate two others that have not recently submitted with the SMC, but who have made a great national impact: Pete, K9PW, has really blasted away the national competition running from K3EAR. The multi K9NS has also done some fabulous work, converting a Multi operation into the top ranking local club in the nation. I only wish both would or could again submit scores with the SMC! We would be knocking at the door of Mt. Airy and PVRC with such stellar operations in our fold once again.

We currently have many VHF anchors. What we need now are for 100 or so other SMC ops to get their state of the art HF + 6 / 2 rigs on the VHF bands. If everyone would get energized, especially for the June VHF, I doubt if anyone could match us. Our depth would simply blow everyone else away. There continues to be no single club capable of mustering 50 + ops for either the June or September events. We could be first VHF club to do so. A dipole is all that is needed on 6 meters in the summer! You could even tune a 10-meter beam in a pinch. Or, if you prefer, a tri-band beam could even be tuned as a driven element on 6. It does not

really much matter in a major band opening. I think at times, a wet noodle would work! Hope to see you on the VHF bands in the contests.

2005 September VHF. In the club competition, SMC placed 6th in the medium category. This is one higher place than last year. On a very promising note, we fielded 16 entries, more than any other SMC effort in September. Our club aggregate score of 618,000 was also quite good – we only have scored higher one other time. Bob, K2DRH again put in a great effort, placing 2nd in the nation in the SOLP. Jerry, WB9Z, was 10th in the nation in the SOHP. Barry, N2BJ, won the division in the unlimited multi. Zack, W9SZ was 9th nationally in the QRP class. In all, we took 4 of 6 division titles. But so many others put in great performances, too: WO9S, WA1MKE, N9TF, K9ZO (KX9X), AA9MY, and W9RVG all went over 10K in their respective classes. Good job, everyone!

On a sad note, news has come through the SMC reflector that Dave Doiron, WA1MKE, recently passed away, sometime after running the 2006 January VHF Sweepstakes. I worked him many times, and I believe he confirmed EN70 for me on three different bands. He was always a pleasant fellow to chat with. I wish his family well.

14th Annual Dayton Contest Dinner

May 20, 2006 at 6:30 PM

(Cash bar opens at 5:30 PM)

Crowne Plaza Hotel, Van Cleve Ballroom

Tickets are \$34 per person, available from
Radioware and Radio Bookstore
<http://www.radio-ware.com>

2006 Dayton Antenna and Contest Forum

TBA



PJ2T M/2 ARRL DX SSB



WE9V, W0CG/PJ2DX, KG0US, W9JUV, KB0VVT, NW0L, KG0UT, WB9Z

Station: PJ2T
Class: M/2 HP
QTH: Netherlands Antilles
Operating Time (hrs): 48
Band QSOs Mults

160: 409 52
80: 1020 59
40: 1979 59
20: 2503 60
15: 3047 59
10: 503 45

Total: 9461 334

Total Score = 9,479,922

Well, that was quite fun, that's for sure. It was quite nice to have short 10M openings both days around 20-21z. It was almost like meteor scatter (not that I've ever done that), but one syllable would be painfully loud, and the next could be in the noise.

I got to operate 10-40 during the contest, and it was just great. Not too much QRM, as I guess EU isn't beaming here and vice versa. It was very easy to keep frequencies, which is one of the things I dread now about SSB contests.

I can't believe the best single radio hour of the contest was the 2nd last hour of the entire contest. It was on 20M and I did a 246 hour, surprisingly beating out 15M on either morning. It was also a blast to start the contest on 40M and have 151/195/170/207 hours. A 207 hour on 40M...unreal.

Thanks so much to Jerry for swapping operating slots with me and giving me that opportunity.

If any of you ever get invited down to PJ2T, or want to just ask W0CG to come down and/or rent, I would highly recommend it, especially if they are here during your stay. They are awesome hosts and the station is amazing on all bands. There's even a A3WS and 30M dipole for WARCing. Also, Cindy (W0CG's XYL) and Geoff (W0CG) did all the cooking and just asked to chip in for the grocery bill. It's not intended to be a B&B, but it sure is like one. In addition to the accommodations here, you're given free access to the Sunset Beach Resort's pool and beach.

(PJ2T is on a 30' cliff, right on the ocean...no beach.)

I was also able to go scuba diving today. The beach resort also has a dive shop and operation. I went out today with them (and plan to go 2 more times) and they were very accommodating to my "condition". Oh yeah...a few days after getting on the island, I've been able to put full weight on my foot. I can literally stand on one foot (the bad one), for a short time.

Either it's the weather/climate/island stuff, or I'm healing, or possibly both. But whatever it is, I don't want to leave!

Big thanks to WB9Z for helping make this possible for me to be down here. I'll be on the bands until Wednesday night or Thursday morning, then back to the snow. Yuk.

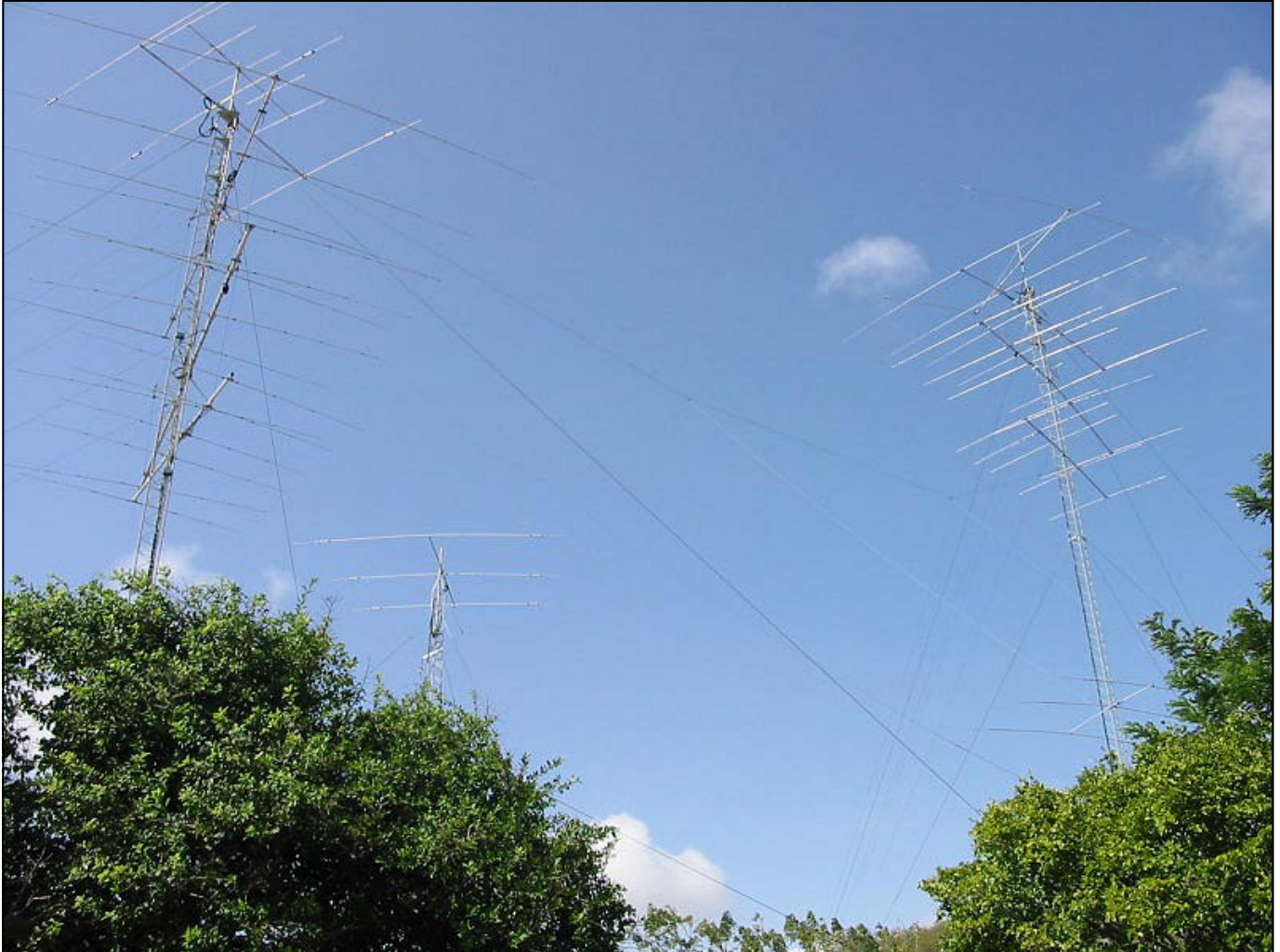
Thanks to everyone for the QSOs, spots, and encouragement.

Chad WE9V



Top: PJ2T stacks on 30 foot cliffs overlooking the ocean.
Right: Station owner W0CG/PJ2DX and W9JUV in the background.
Bottom: WE9V, Chad, and NW0L in the background.





Top: PJ2T stacks from the ground.
Bottom L: Flexible antenna switching and effective filtering are critical in a multi-op setup.
Bottom R: The main operating position.



SMC Stuff

SMC Clip-on Badge

by NV5A

The SMC logo appears at the top-center of the badge in black and white. Your call sign, first name and city & state appear in dark blue. The SMC name badge as shown with the slot & strap with swivel alligator clip, but there are other choices.

Price: \$14.50 (includes s&h).

Order now from **The SignMan**

Visit his full color web page to see other items you can get with the SMC Logo:

www.thesignman.com/color/



KC9FD

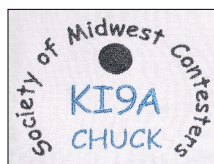
SOCIETY OF MIDWEST

Club badges can be obtained by sending a check for \$5.50 to:

Midwest Engraving
6920 W. North Ave.
Milwaukee, WI 53213

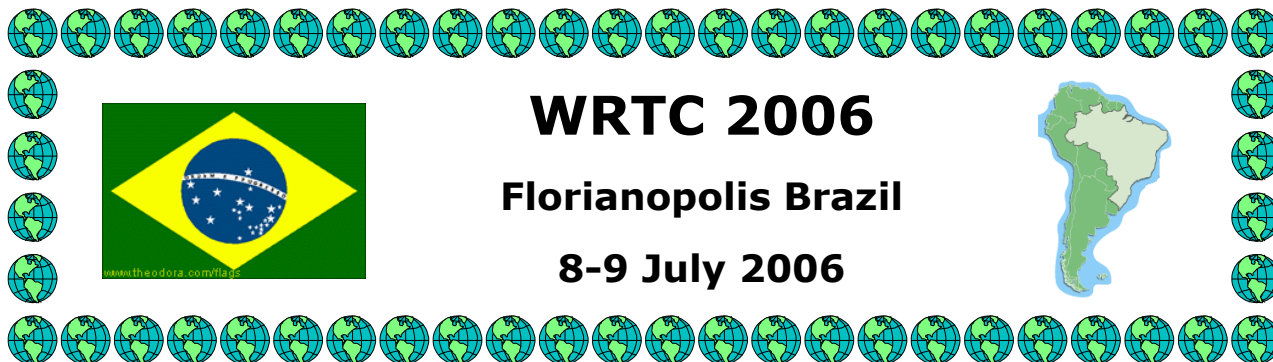
Phone (414) 258-8655
FAX (414) 258-8656

Be sure to note that it is for a "Black Hole" badge and please allow a couple weeks for delivery.



SMC Shirts

SMC short-sleeve Polo shirts are available in two styles: white shirt with "SMC" in black and "name and call" in blue lettering as shown below, or red shirt with black lettering. The cost is \$20, including shipping. You can email your orders to AD9P@swbell.net (Al) or N0UXQ@swbell.net (Sandy)



WRTC 2006

Florianopolis Brazil

8-9 July 2006



Member/New Member Information/ Update Form

Name: _____

Call: _____

Address: _____

Phone: _____

E-mail: _____

Please send updates to:

JON OGDEN, NA9D
905 SURREY LN
ALGONQUIN IL 60102-2058

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**

**Please consider putting an article
together today!**



The Society of Midwest Contesters

Brian Maves, K9QQ
20 Carlyle East
Belleville, IL 62221

FIRST CLASS MAIL

