MIDWEST VHF-UHF SOCIETY

Vol. 19 No. 6 **www.mvus.org** **August, 2005**

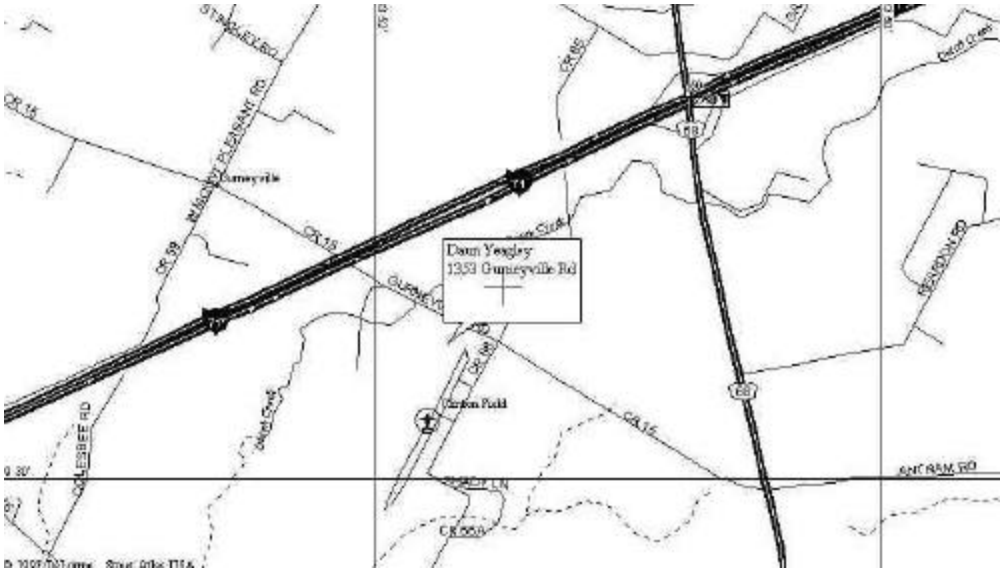
Club Memorial Call W8KSE 10 GHZ Beacon, presently off the air.

Annual Picnic and Antenna Measurement, Sat. 27 August at Daun & Karen's place near Wilmington OH. Set up; 10AM Picnic 4 PM … For directions see map below

Contents

Mid-Atlantic States VHF Conference (Packrats) Sat Sep. 24, 2005 in Bensalem PA. See backpage**!**

The Annual Picnic and Antenna Measurement location: (Map provided by Daun, N8ASB)



De N8ZM

By now, most of you have heard that Bob French, N8EHA, of nearby Eaton, OH, became a Silent Key due to a tower climbing incident involving an antenna and electrical power lines. Bob was a strong supporter of MVUS over the years, and was responsible for our having the appropriate legal documents prepared and executing our incorporation in the state of Ohio. He also served as club secretary for several years, and proposed the name "Anomalous Propagation" for this newsletter. Wherever he went, he was an active promoter of amateur radio, and I had the pleasure of knowing him for the better part of the last 20 years.

When we ordered our white boxes, Bob volunteered to retrieve them from the seller in Maryland, some 400 miles from here. He and wife Cathy piled into his sedan and motored to Columbia, picked up a rental trailer, then the white boxes, and headed back towards home. The trailer and its load probably weighed in at the better part of 6000 pounds, and Bob's transmission just wasn't up to the task of dragging that load up and down the hills of western MD. He had to leave the trailer in the middle of nowhere in PA, and get some serious work done on the tranny, then limped on home. KB8ZR and I hopped in my truck and ran to PA to pick up the load, some 14 hours of driving for us, as I recall. What impressed me the most about this episode was that Bob was willing to volunteer that much of his time when he really didn't have any plans to get involved in the 10 GHz activity; he just did it for the good of the club.

I could say a lot more about Bob, knowing him for as long as I did, but the bottom line is that amateur radio lost a devoted and hard working supporter, and I lost a friend. A donation from MVUS was made to PARA, Bob's 'home' club.

I'm sure that none of you need to hear a lecture on safety, but Bob's untimely death was the result, in part, of underestimating the dangers involved with the climb he was making. Never assume that insulation is intact; wear your belt; wait until you are in position to hoist items up the tower; and when the job looks risky, stay on the ground!

To move along to other business, our **annual picnic cum antenna test** is coming up on August 27th, at the usual place: Daun and Karen Yeagley's, near Wilmington. I'm sure Gerd has included a map and other info elsewhere in this issue, so I won't be redundant. Bring the spouse, the kids(or grandkids), and a small dish to share. As usual, MVUS is providing the burgers, dogs, and drinks. If you let me know, via e-mail (n8zm@mvus.org), or call me at 937-667-5990, about what **antennas and other equipment** you'd like to test, I'll be able to drag along the right test gear. Daun is checking out his antenna rotor and software so that we can do patterns again. I should be able to accommodate type N, SMA, BNC, and PL-259 type connectors, but if you have something else, please bring along an adapter from one of these to yours, if you can. We should be able to check frequency, power, impedance, and noise figure up through 20 GHz (and down to 300 kHz for Garner and Lundy!) .

We plan to start a little earlier setting up, like 10 AM, so that we will have plenty of test time before we have to stop to eat. See YOU there!

Tom, N8ZM

Need cable, connectors, rotors?

RG-331/U 50-Ohm Hardline - Like new ½ Times Wire & Cable; smooth outer shield, with black jacket. (2) 160 ft. lengths. Priced below RG-213 @ $ .37/ft! **Connectors** @ $10ea. to mate with PL259 or type N.
Rotors: Wilson WR-1000 Heavy Duty. Weighs 65 lbs. (compare to 28 lbs for Tailtwister T2X); have two, one unopened; $450 each. Also large Prop-Pitch rotor; weighs 83 lbs; $400.
Call **Joe, WA8OGS**, at 513-385-4198 in Cincinnati (near I-275 and I-74) or email to burkej@one.net for more details.

Bob French, N8EHA, SK By Al Stone, KB8RPO and Gerd Schrick, WB8IFM

A tragic tower accident took the life of one of our members, Bob French, N8EHA, last Saturday, July 30, 2005. He was only 52 years old. Bob had gotten involved in a project that equipped firehouses with a ham radio station for back up in case of an emergency. He had applied for and secured a grant to install antennas and equipment in all the Preble county fire stations. He also committed to train and give ham radio classes to fire fighters.

Last Saturday there was a work party of six at the New Paris, OH, fire station. An eight foot cross member had been mounted at the 40 foot level of a 60 foot tower last fall and now a vertical triband, 6m, 2m, and 70cm ham antenna was successfully installed on one side of the outrigger. After a problem with a fire department discone antenna was corrected, Bob climbed the tower pulling the discone antenna up with the feed cable. This antenna was to be mounted on the other side of the outrigger. A 32kV transmission line, the highest voltage permitted in residential areas, was running close by the tower, but it was deemed acceptable.

Bob was approaching the 40-foot level and moved his hand with the feed line and antenna up to grab another rung of the tower. At this point the antenna somehow came in contact with the high voltage power transmission line exerting a tremendous jolt, which probably killed him. There were severe burn marks on one arm, on the legs and across the lower body. As he was climbing with the belt disconnected, he fell to the ground from a height of between 35 to 40 feet. Al Stone, KB8RPO, was first at his side and found no sign of life. There was an effort to resuscitate him by the EMS and others on the scene, but nothing could be done, he was gone. It is almost certain that electricity killed him instantly.

Bob was a member of the Midwest Vhf/UHF Society from the start and contributed in many ways. He headed the effort to get the society incorporated and give it non-profit status. During the years he was employed at UD he arranged and made university facilities available for the club. One year we had our yearly picnic and antenna measurement on campus. We could use a UD lab to modify and tweak our white boxes (10GHz transceivers). I helped Bob with the satellite set-up of the amateur radio UD club station. Bob also spent time at the P3d integration lab in 1997 in Orlando Fl. His contribution there was installing stain gages on the spacecraft.

For many years Bob was co editing the clubs newsletter with me. That is the time I got to know Bob well. If memory serves me right, I think he came up with the name “Anomalous Propagation” for the newsletter. He positively introduced the well-liked column “This and That” which is now regularly page 4 of the newsletter. Once a month I would get together with Bob at UD, usually on a Saturday afternoon, to put together our newsletter. There we had access to a computer and the WordPerfect software. These were the days before spell checker and Bob performed admirably the eagle eye function of a proofreader and editor. However, scotch tape and Xerox machine got heavy usage as well.

When he left UD and moved out West to Eaton this working relationship naturally suffered. Bob, however, remained a faithful member of MVUS and would occasionally show up to our 4th Friday meetings, the yearly August picnic or the x-mas party. Through the tragic tower accident I learned that Bob in the last few years had been very active in the PARA (Preble County Amateur Radio Association).

I find his efforts with the ham stations at fire departments particularly intriguing. Think about it, here you have a facility already outfitted with some kind of tall structure, and, of course, with a couple of firemen at hand at all times. What better opportunity to make hams of them. Then they could learn the art and technique of communication and have a back-up ham radio station for emergency traffic. And wouldn’t it be a lot more interesting to have a QSO rather than playing cards or just doze when waiting for the next call. An effort is made to have all the astro-nauts pass the ham exam so they may operate the ham equipment on board the shuttle or the space station. Just think of how many more fire stations and firemen exist in this country, all potential hams! Lets keep up Bob’s work!

Bob went back to school later and graduated with a degree in electrical engineering in 1995. He took great pride in his knowledge of electronics and was always eager to share it with anyone who wanted to know something. He was a great teacher. His fellow hams from PARA as well as the members of MVUS will sure miss him.

This and that 8-05

- **International Spy Museum** (Washington DC) "The collection includes everything from a circa 1960s KGB shoe with heel transmitter to a CIA-issued tree stump listening post. This particular listening device was placed in the woods near a Soviet base to capture secret military radio transmissions and relay them to a US satellite." [Mark David]

- **Weather Report.** Jamie Simpson, a local weather reporter, went to see family in Massachusetts. "I did not look at a forecast. I wanted to enjoy the changes, and did I ever!"

- **Luxury Goods.** Poor people are well aware that luxury goods are essentially useless. But they also know that the more useless the product you can buy, the more status it gives you! [Ode]

- **Reading Books.** Why some kids don't read books? It's not because of TV, they compare books to movies. Friend Dan says: "I would read a book a day if they had as much stuff blowing up as they have in the movies." [Harris Davidson, 15]

- **Grandma's Chick**. Twice a year grandma came to visit. "How are you my chick?" she'd day to my father as he took her raincoat and head scarf. We girls giggled. Dad is six feet tall and decidedly unfluffy, but to grandma he was always a fledgeling. [Kate Chambers]

- **Service Recovery**. This business concept is based on the premise that it is cheaper to make current customers happy than it is to find new ones to make unhappy. So when customers complain, the employees are encouraged to listen and accommodate them. [D.L.Stewart]

- **No Soap**. …I have never before understood what a magnificent invention soap really is. We made all sorts of attempts to wash the worst of the dirt away …Water had no effect upon all this grease; it was better to scour oneself with moss and sand … The next best plan was to scrape our skin with a knife … [Fridtjof Nansen, Arctic Explorer in 1895]

- **Internet and Books**. …Because of the wide availability of the Internet, misinformation can be widely spread and become embedded in much supposed history. Incorrect information is often placed by persons who have not adequately researched the subject. On the other hand incorrect facts that do get printed in books may have a very long life. Either way a little doubt may be a good thing. [Stu Faber]

- **Dumping Coal.** Coaling (of a train locomotive) was by gravity from a dock that was refilled from bottom dump hopper cars pushed up a steep track over the top of the dock. According to a Pennsy employee relative, engineers needed nerves of steel in order to get a running start up this track and then to get stopped before going off over the top end bumper post. [Harry Nobel, N8CYS]

- **Numerical Needlework**. Before computers humans did all the calculations. Women were especially good at this kind of work. One even measured computing time in "girl-hours". A complex calculation might even require "kilo-girl-hours". [Book: "When Computers were Humans" by D.A.Grier]

- **American Pilsner.** "It's like Wonder Bread: A marvel of technology is needed to achieve such bland, yet consistant results". [Garret Olliver] (American coffee is in that category also. ED)

- **Change.** "When you change the way you look at things, things you look at change!" [Max Planck]

- **More on Change**. "Only the wisest and stupidest of men never change!" [Cofucius]

2005 UHF Contest Rover Report 6-7 August 12, 2005

By Lloyd Ellsworth, Ne8i

NE8I rover. Operated 16 hours, drove 955 miles, 32.5K points, made contacts from 7 grids. 107 contacts, so that is about one contact every 9 miles, every 9 minutes, on bands from 222 through 47 GHz.. Started from EN74 drove South down along Lake Michigan to Grand Rapids. East home. Then Sunday, North to Flint, then South to Ann Arbor. EN63,64,72,73,74,82,83. At all my 7 stops, I did not stay to operate for longer than an hour. Saturday evening, there was one band opening to the west. I could not make use of it. My yagi's were pointed east while driving. Otherwise, it was the usual dead band.

Rovering is very hard on equipment. Sometimes, a small problem can affect many bands. Always making fixes, and trying to make improvements. The only bands that held up well this year were 222 and 432 Mhz. 903 and up, had problems. Vibration, environment, transients, all take their toll on equipment. This contest, some transients took out my sequencer for 903 and up. Since 903 was hooked up. Took out 903. Made all my normal high power 1296 and up, not useable. My low power back up, ran fine for several hours, then the FT290 slowly decided to die. Making it harder and harder to make contacts. Towards the end of the contest, I was able to splice in an FT817.

So, lost a sequencer, and have to fix a FT290 and 903 transverter. Don't know what I will have fixed and working by the Cumulative, then September. August Cumulative, planning on being on Lake Erie. September on Lake Michigan. September VHF, plan to use the same route as this contest.

2-m Tropo California – Hawaii

19 July, 2005 (ARLP 030 by K7RI)

Chip Margelli, K7JA in Garden Grove, California reports that a tropospheric duct is providing propagation on the 2-meter band between Hawaii and Southern California.

I'll let Chip tell the story:

"The tropospheric duct to Hawaii is open again. I worked Paul Lieb, KH6HME last night (Sunday) at about 0150 UTC July 18 on 144.170 MHz. Paul's signal was up and down, peaking S6, but he was easy to work.

"I use 100 Watts from an FT-736R and brick amplifier to a Cushcraft 124WB (4-element wideband) Yagi at about 70 feet on my tower in Garden Grove."

Chip continues, "A number of other Southern California stations worked Paul, as well.

"The beacon on 432 MHz was also being received well at the time."

He concludes, "The tropospheric ducting maps look very favorable over the next 48 hours, so we have high hopes for more openings to Hawaii this week."

New Members drawn out of a hat!

We had visitors at the Hamvention drop slips with their name and address into a jar and at the last meeting we pulled a few of those to award a one year free membership to the club. We welcome: David Bastress, K3GAU; Ed Shaffer, WD8BFC; Mark Travaglini, WD8DPA; Russel Dwarshuis, KB8U; and John Schwall, W8JAQ. Actually Mark & John are already members, so they get their membership extended another year. Welcome to all new members!

Field Day 2005, Milan, IN. EM79LD

By Rod Owen, , WG9F

Well, Field Day has come and gone once again. I have several pages of QSOs in the log, some itchy mosquito bite bumps and a sleep deficit that has not yet gone away, but I had fun !!

The WG9F Field Day 2005 operation was similar to that of recent years, but we had more OMs for the Saturday phase. This resulted in a more relaxed atmosphere, as we were able to switch off operating and logging tasks between operators before fatigue set in.

We began operation promptly at the official Field Day start time (2:00 pm local) and operated until after 2:00 am. We picked up operation again at 7:30 am and operated until the event finished at 2:00 pm. We did take time to check in to the Sunday morning MVUS net from the FD station, on 144.280 and 28.960 Mc. After initial contact on those two frequencies, net participants were pleased to QSY to 50.130 and 432.110 Mc to give us extra points. We had great WX throughout the weekend, hot and sunny, and many 807s were consumed.

In addition to this author, operators included Mike, KA8ABR, Steve, K8UD, Bob, W9JDT, Jim WB9SRL, and Brian, a SWL who sometimes attends MVUS meetings.

We ran one HF station, on all bands 160 through 10 meters, and one VHF/UHF station on 50, 144 and 432 Mc. The HF station utilized a temporary wire antenna strung between trees. The VHF/UHF station utilized a temporary tower with beams that were erected early on the Saturday morning of Field Day. For antenna details, see my Field Day 2004 report in Anomalous Propagation one year ago. The HF station utilized a linear amp. The VHF/UHF station ran 100 Watts on 6 meters, 50 Watts on 2 meters, and 20 Watts on 432 Mc.

Some very good 6 meter openings were experienced several times during the weekend. Flat band conditions prevailed on 2 meters and 432. We made 43 QSOs on 50 Mc, 14 QSOs on 144 Mc and 2 QSOs on 432 Mc.

6 Meter states worked were NM, CO, FL, TX, GA, MI, NC, VA, KY, IN and OH.
2 Meter states worked were OH, KY and IN.
432 states worked were OH and IN.

On HF, 249 contacts were made, with some on each band 160 through 10 meters, though the majority were on 80, 40 and 20 meters.

Apart from being a lot of fun, the operation gave us confidence that we could put together, at very short notice, a completely portable station. The station was totally self-contained and independent of all external resources. We achieved excellent performance on HF, VHF and UHF simultaneously. The event also helped to sharpen our operating skills and gave us practice in accurate communication under very crowded band conditions. On HF, we were frequently making QSOs with SSB stations that were stacked only 1 kc apart along the band.

The Red Planet in August 2005

This month (August) Earth is catching up with Mars in an encounter that will culminate in the closest approach between the two planets in recorded history. The next time Mars may come this close is in 2287. Due to the way Jupiter's gravity tugs on Mars and perturbs its orbit, astronomers can only be certain that Mars has not come this close in the Last 5,000 years, but it may be as long as 60,000 years before it happens again.

The encounter will culminate on August 27th when Mars comes to within 34,649,589 miles of Earth and will be (next to the moon) the brightest object in the night sky. It will attain a magnitude of -2.9 and will appear 25.11 arc seconds wide. At a modest **75-power magnification** Mars will look **as large as the full moon**.

Field Day 2005

By Gerd, WB8IFM

In my amateur carrier every Field Day has its special attributes. This year's field day I will remember for the introduction I got into the workings of 6 m, the **"magic band"**. You see we had this "preparation" session on a Saturday two weeks before field day. Ed, K2VEE, checked out the clubs wire trap dipoles and John, N8FJ, actually put together a horizontal loop antenna for 6m. He didn't quite finish it, but he promised to have it ready by field day!

So I was anxious to find out about the "magic band" as it is lovingly called by those in the know! I had tried my luck on 6 m earlier (1970s) and treated the band just like another short-wave band, made a few dx contacts, using the Drake TR6, with British stations (who at the time could get a license) and than gave up. There was too little going on in comparison with the hopping 10m band.

Since at present no high orbit satellite was available, my field day contribution this year was operating a normal 2m/70cm station.
It turned out that band conditions on 2m and 70 cm were disappointing. The lingering storms we had late Saturday afternoon disturbed the atmosphere so that no reflecting or ducting layers developed at sunset. For the 6m band, however, the storms may have actually helped with propagation.

So on 2 m we worked mostly stations around Ohio, Indiana and Kentucky but missed our neighbors in Michigan, Pennsylvania and West Virginia, and the best dx was a contact with Bowling Green.
As for 6m, the situation was indeed different. So the thunderstorms might have supported creating E-layers.

I had been following reports about 6m band openings during the past few weeks with strong signals from all over the US including Hawaii. Those openings depend on the E-layer of the ionosphere, which can be intense but spotty, and of sometimes short duration. That sounded to me like we were back in the old days (1950s for me) where you spent a lot of time rotating the dial in search of signals, not exactly knowing what to expect.

Today we know a lot more about propagation but still it is not quite clear as to how it works. Years ago Joe Reisert, in a presentation, named some 30 different types of propagation for the VHF/UHF and microwave frequencies. Also hams have not had equal access to 6 m and thus experiences on a worldwide basis are only now come to bear. The US, however, was in on 6m early on and I heard stories of working all states (from Colorado) on that band in the 1950s.

We've made some contacts per ground wave (all inside Ohio) in the afternoon and now around sunset I had a chance to break off from VHF and try my luck on 6 m.

My first impression: all the audible signals were of good strength and they all seem to be coming from one or two areas of the country consistent with theory of reflection by an E-layer cloud. During periods of maybe 15 or 20 minutes you would work several stations from the same area then those would disappear and stations from another part of the country would appear.

Our halo antenna on top of a 30' tower worked real fine. John, N8FJ, had done a good job in tuning for resonance and minimum SWR. In the course of 1/2 hour we made contact with stations in Alabama, Florida, Georgia and Colorado, we also heard stations from Texas. Then after the sunset, the band went dead ! But it had given me the experience that I will always remember as my first experience with the "Magic Band"

The picnic, as usual was outstanding, the xyls all brought their favorite dishes and we had a feast!
Unfortunately the approaching storms cut the event short. However, except for some strong winds and very few drops of rain we were bypassed by the severe weather. I was amazed to see pictures later on the 11 o'clock news with hail, flooding and uprooted and fallen trees in other parts of our area.

Lake Erie Microwave Rover sites

By Lloyd Ellsworth Ne8i

Since I have been asked, here are some select, suitable for all types of microwave **rover sites for Lake Erie** . There are many more. This list is for Erie PA and West. Mostly Lake Shore sites (except Bean Rd)

Presque Isle State Park. No fees. EN92we. Erie PA. Sunset Beach, Sawmill beach, near the end of the peninsula. Presque Isle juts out several miles into Lake Erie. Parts are in 6 different 6-digit grids. Most of the peninsula has a dune between the road and beach, typically from 5 to 10 feet high. Limited parking. Limited useable horizons. Most access, blocks vehicle rovers. Walk over the dune to the beach. Very busy on weekends. SR 832 from I-90 about 8 miles North. Well marked. Pay attention to parking and other important signs.

Bean Road. EN91jm. 10 miles south of Exit 200 on I-90. Chardon Ohio. Exit 200, south, right at first light, Auburn Rd, south 10 miles to Bean Rd. Left, up hill. Highest spot in Geauga County. No real parking, only a pull over, side of road and farmer field. Have had really good success from here.

Lake Erie State Park EN91dm Dead Mans Curve, I-90 Downtown Cleveland Ohio. Hard to miss, but can be a bit tricky to access from I-90. My experience has been some of the strongest signals from Ohio, best tropo from here. Alternate

Cleveland Lakefront State Park EN91em

Beaver Park EN81uk Amherst Ohio. This one K8WW uses quite a bit. US6.

Marblehead Ohio, (Light House) State Park EN81pm. SR163. The Light House parking lot is not very useable for microwave rovers. East of it, along the highway, are a couple of pull off parking lots. Limited parking, but quite useful. Good to the East and North. Not to the West. Great view of Cedar Point.

Scott Point, Ohio EN81oo, North end of SR 53. Tiny park. very limited parking. Good to the East and North, somewhat to the west. There are a few other useable nearby sites. Mostly pay parking. There are a few other sites along Catawba Island. I have not tried any of them. Also, there are sites in the islands, but ferry travel is slow, and can be a long wait.

Port Clinton Ohio EN81mn. West of downtown Port Clinton on SR 163, is a stretch of parking along the lake. Downtown has several pay for parking lots, but very few useable spots for Microwave rovers. SR 2 West of Clinton to Toledo, there are several sites. Some are pay for parks. Most I have not even been to. Excellent Lake horizon, West, North, but limited to the East.

Sterling State Park EN81hv, Monroe Michigan. Fee to enter. Exit 15 I-75 half mile east to the park. There are 3 parking lots. Lots of parking. Recently rebuilt. Each parking lot is several hundred feet from the Lake. The best is the southern parking lot, but they have built a tot lot playground right in the worst place. The middle parking lot is my next choice. Park is right at the corners of four 6-digit grids, so, will give your GPS a good check out. Good horizon to the south, and East quite a ways. Eventually Pointe Pelee blocks some of the paths.

Erie Metropark EN82jb Flat Rock Michigan. Fee to enter. Exit 29 I-75 and follow the signs. Several miles. Picnic Cove is the parking lot I recommend. Southern most parking area. There is a bird watcher parking lot and observation platform further to the south, but I don't recommend it. Poor access, blocked views, and lots of bird watchers. Real good paths to the south. East along the Lake to about Painesville Ohio. Then Pointe Pelee gets in the way. Especially to the Canadian Shoreline. Several beaches, and related parking lots, are in eyesight, and well over 1 KM apart, for those 1 KM contacts.

So far, we have had really good luck with Lake Erie Tropo. Always keep an eye to the horizon. The color tells you what is up. Blue or gray down to the horizon, typical dead band conditions. Best just after sunrise then, propagation falls off. Improves around sunset, just after sunset. White, it can build throughout the day. Red violet, purple, that means it is going to be really good. "Ozone Action Day", good news for microwave propagation.
Don't forget rain scatter. Rain and storms can cause some unusual propagation, mostly signal distortion, and unusual paths and dish headings. Also, have made many contacts by reflecting signals off freighters on the Lake. Even to blocked directions from a given site.

Yellow Brown or Green sky, you might want to seek cover. At least turn on Skywarn weather, stay alert.
I do have other sites, and I am sure more will get passed around. All of the above sites have been recently checked out.

Lloyd Ellsworth Ne8i
POBox 0338, Birmingham, Michigan 48012-0338 USA
EN82jm Beverly Hills Mi & Rover 160M - 47GHz
e-mail: ne8i@arrl.net

Additional Info on Lake Erie Rover Sites derived by editing Lloyd's list and adding a few more. From West to East on the Ohio shoreline

- Mersea Park EN82RA on beach, good to W, SW
- Wheatley EN82SB on beach, good to S, SE, E, ENE
- Morpeth EN92CI about 20ft above lake, good to S, SE, E, ENE
- Eagle EN92FN about 60ft above lake, good to SSW, S, SE, E, ENE
- Port Stanley EN92JP on parking lot behind busy beach - limited angles but has been OK to Port Clinton, Eagle
- Port Bruce EN92LP on beach, good to WSW, SW, S, SE
- Clarke Road EN92OP about 60 ft above lake, good to WSW, SW, S, SE
- Long Point (Hastings Rd.) EN92SN on beach (about 100 ft from parking), good to WSW, SW, S, SE
- Oriel EN93PB inland hill, somewhat limited angles...has worked well to W2DRZ in past, not visited recently
- Mohawk Bay FN02FU about 60 ft above lake, good to S, SE - i.e. WNY (not visited in about 2 years)
- Ayr (Observatory) EN93SG inland hill, good to S, SW, some trees toward KB8U/WW8M... limited potential to SE
- Fonthill FN03IA,inland hill but can see WNY hills, good to SE, S, SSW - possibly as far west as Northeast, PA...Presque Isle Park is doubtful. Sites very nearby good for N,NW,E.
- Skylon Tower FN03LC (Niagara Falls) tourist observation tower, good in all directions.W2EV/VE3 has used it, loud on 10 GHz but with very limited 2m talkback capability.

All of these sites are at least 16 km apart. Hope this is useful for planning.73, **Steve Kavanagh VE3SMA**

2005 Mid-Atlantic States VHF Conference Sat Sept 24, 2005

Sponsored by the Mt Airy VHF Radio Club, Inc.

Courtyard Marriott (215) 639-9100 3327 Street Rd Bensalem, PA 19020
Special Conference rate $99/night includes a breakfast coupon http://www.bensalempacourtyard.com/

Advance registration of $69 includes: conference registration, proceedings, Fri eve hospitality, Sat AM coffee break, Sat lunch, door prizes, auctions, Sat eve Banquet and a ticket to the HAMARAMA radio hamfest on **Sun, Sep 25th** nearby at the Wrightstown Grange

Speakers include N1JEZ, W1FKF, W2PED, K1JT, K1WHS, KA1ZE, N2UO, ND2X/5, N4FLM, N1MRC
****

Conference chairperson: Jim Antonacci, WA3EHD 215-659-4359 jantonacci@worldnet.att.net or
Rick Rosen, K1DS 610-270-8884 rick1ds@hotmail.com
Web site for further info and maps: http://members.ij.net/packrats/latest.htm

Cecks payable to: Mt Airy VHF Radio Club, Inc. Pease register early! Adv. Registration deadline Aug 31 Send requesr and check to: DAVID J MASCARO, SR W3KM 1603 MINK RD OTTSVILLE PA 18942

Visit Philadelphia's historic attractions: the new Liberty Bell and Constitution Center, Atlantic City and Cape May, NJ, and the Poconos are also great visitor destinations.