

Next Meeting: July 28 at the  
MCL Cafeteria in Kettering

2017

June/July

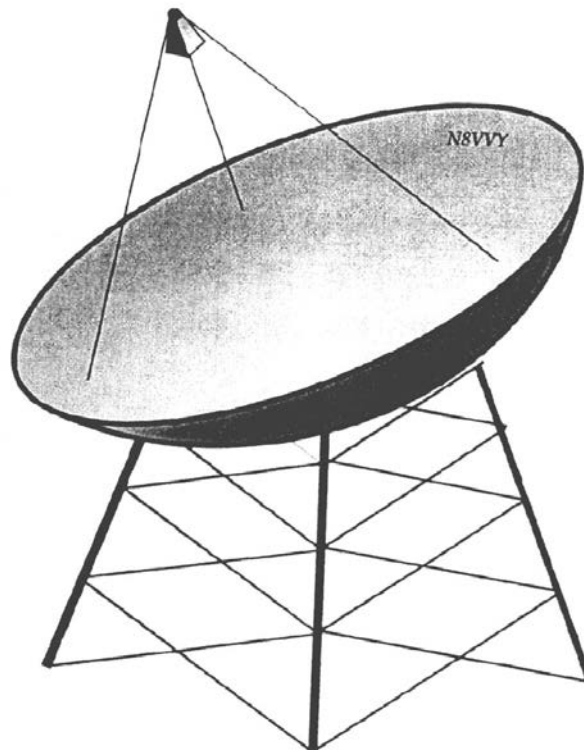
# ANOMALOUS PROPAGATION

Newsletter: *The Midwest VHF/UHF  
Society*

## Editors:

Gerd Schrick, WB8IFM  
4741 Harlou Drive  
Dayton, OH 454 32  
(937) 253-3993  
[WB8IFM@ARRL.net](mailto:WB8IFM@ARRL.net)

Steve Coy, K8UD  
3350 Maplewood Dr.  
Beavercreek, OH 45434  
(937) 426-6085  
[K8UD@ARRL.NET](mailto:K8UD@ARRL.NET)



Material from this publication may be copied  
with due credit to the source

Annual Society membership is \$ 12.00. Please  
make checks payable to Joe Muchnij

**De N8ZM...**The June meeting was fun, despite the rough weather that came up while we were in the restaurant. The July meeting will be on the 28<sup>th</sup>. Most of you should receive an email from Jim Bacher, WB8VSU, with this same reminder. And I can't pass up the opportunity to suggest that if you are not receiving Anom Prop via email, it's because you haven't provided your email address (unless of course you don't want to, and we respect that). Further, if you haven't paid your dues in a while, now is a good time to catch up. For a buck a month, how can you go wrong?

Our annual picnic is scheduled for Saturday, August 12<sup>th</sup>, and once again we will be at the home of Daun and Karen Yeagley. The usual rules apply: MVUS will supply meats and soft drinks while we ask you to bring a snack, salad, side dish, or dessert to share. We always have plenty left over so just bring enough for 6-8 people. Starting time is noon, but setup will be at 11:00.

The picnic is always part technical session, with plenty of test equipment available to help you wring out problems or just calibrate your own gear. Do please let me know what you'd like to test so I can work with Daun to have the right gear available.

I suppose that some of you are wondering how many more sentences I'll crank out before I mention Hamvention. Now you know. But more likely that thought had not crossed your mind. I'm OK with that; it's not exactly a life-altering matter.

First, I want to thank Mike, N8QHV, John, N8VZW, and Joe, WA8OGS, for minding the store, er...booth, at the big show this year. There may have been others as well, and if so, thanks to those folks as well. They signed up some new members, collected dues from some current (well, they are now) members, and generally represented MVUS for the weekend. We were in the tent known as Building 6, and while being in a tent had its pluses and minuses, these guys made it work, despite water on the ground when it rained hard, and not having electricity because all of the outlets were taken when they arrived. Maybe the first problem was a good reason not to have the electricity? And the general lighting provided needed a few more dB as well. Anyway, thanks guys!

If you attended Dayton this year, you know all about the traffic and the mud, so I won't belabor those topics. Although I didn't have a committee job this year, I have spoken with a few folks more closely involved who have told me that those problems, and others, have been noted and are being addressed. All in all, the folks on the committee did a great job considering the short time available to address a lot of things that we could take for granted at HARA, not to mention that the various layers of bureaucracy at the new venue probably had to learn by doing to really understand what was needed to host this show. So next year should see a number of improvements made. Could it possibly rain as much again next year? Let's hope not.

Mike, W8RKO, and I need to get back to installing the 2m and 432 beacons on the Englewood water tower, along with a mesh-network node. I am hopeful that now that we have the big show and some vacation travel behind us we can get a lot of the remaining tasks done by the end of June. I expect it will take 3 or 4 of us at the tank for part of a day to pull the cables up, and install the antennas. I know that Mike has a few more front-end tasks to complete first so that will govern the timing.....That's all for now, so I'll see you on the 28th at the MCL! 73 de Tom,

## **This & That 6+7-17**

**Life.** Clever people master life; the wise illuminate it and create fresh difficulties.

[ Emile Nolde]

**Behave.** To handle yourself, use your head; to handle others use your heart.

[Elenore Roosevelt]

**Fly over.** “California and New York think the entire Midwest is something to fly over en route, and most Washington politicians probably can’t even name the lakes.

[David Shumway]

**Indiana.** Oh yeah, that’s somewhere between NY. and California. [ S.A. Sept. 1972]

**Donut Planet.** “ A moment on the lips, forever on the hips.”

[Brewster Rockit]

**Grandma Speaking.** “It is hard to hear what somebody else is saying if you are always talking!”

[Amelia Robinson (smart mouth)]

**Eiffel Tower.** It was built 1889 w/o any computer, so were the Pyramids and the Colosseum. Today a silly one story house cannot be planned w/o somebody running to get his laptop battery charged.

[Ove in A Man called Ove ]

**Dendrochronology.** A method of dating wood by growth ring patterns. Introduced by American Astronomer A.E. Douglass. Past climate can also be studied by paying attention to the width of the rings, which indicates rainfall during the growing season.

[ Writer’s Almanac by Garrison Keillor]

**Nothing New.** “I saw with regret, (and all scientific men have shared this feeling) that whilst the number of accurate instruments was daily increasing, we were still ignorant”

[Alexander v Humboldt ca. 1800]

**Western Civilization.** “ I think it would be a good idea.”

[Mahatma Gandhi]

**Early Death.** “Be careful about reading health books. You may die of a misprint.

[Mark Twain]

**Eclipse.** The ground under the total eclipse is raised approximately by 1.5” by the combined increase in gravity of the sun and the moon.

[Time Mag. }

**NE8i.** Lloyd Ellsworth, Rover, who became a silent key recently was born in 1950. [QRZ]

## SeaPac Hamfest *by Tom, N8ZM*

I attended the SeaPac hamfest and ARRL Northwest division convention in Seaside Oregon the first weekend in June. This was my second year there and it is a very nicely done weekend. Friday, I attended an all-day workshop on the new Raspberry Pi 3B, which included in the fee a Pi 3B, 7" TFT Touchscreen display, power supply, case for the Pi + display, and a NW Digital Radio UDRC-II, which is an interface board talk to either the Yaesu DR-1X repeater, or any other radio. Oh, and a 16 GB SD card with a variant of Raspbian Linux as well as a bunch of software loaded and ready to go. Part of the day was spent assembling the Pi, display, and case. The rest covered some command line tasks as well as explanations of how to use the installed apps, such as XASTIR, FLDIGI, and Gnu Radio Companion. Really cool stuff! There were about 10 different presenters on the various topics, as well as mentors who walked around the room helping us through the various hands-on tasks of assembling and typing command lines. This was really nice because if you got a little behind the rest of the class, you had someone on the spot who could help you catch up quickly. Nice touch! Especially for a command line challenged fellow like me. I am planning to go again next year, and I hope they will have another excellent workshop topic to offer.

While the flea market and commercial exhibits are not as numerous as Hamvention, there were lots of both kinds of sellers there, some familiar, and some not seen in Dayton, like WIRED, who specializes in LED replacement bulbs. His prices are reasonable and he offers bulbs with most of the common bases, not just the standard screw-in that we all know and love. You can tell from the number of O'scopes in the flea market that Tektronix HQ is close by, as well as other well-known electronics and software companies. There are also forums on Saturday and Sunday which cover a wide range of topics; this year I tried to attend most of them, although like Hamvention, there are schedule conflicts to manage.

There is also a Saturday night banquet, and being the Pacific Northwest, the salmon is excellent! The veggie medley was actually edible, which I have not found to be a common trait in most restaurants. There were, of course, a few speeches to be heard, but those were kept short, and there were also door prizes. My general luck being what it is, I didn't win anything but there were some nice radios taken home, both on Saturday night and at the Sunday prize drawing. And registration for just the show was only \$10! All in all, a very nicely done event.

If you do make it out to that area, check out the Tillamook airfield museum, Tillamook cheese, Fort Stevens, and the town of Astoria. Those are just a few of the highlights, as that whole area has many wonderful attractions and the scenery is great, especially to a native flatlander like me. It's about a 2-hour drive from the Portland airport, and a fairly easy one. I hope you can make it out there sometime, if you haven't yet.

## The Magic Band 6-m Openings on Field Day

Every Year during Field Day, which is on the last weekend of June, we hope for an opening of the “Magic band”. Well in spite of the low activity on the Sun we were lucky: There was a “cloud” over the East Coast on Saturday Afternoon and then again on Sunday. Early on Sunday a solid cloud over entire Florida Brought in the bulk of contacts. Several times I checked on other stations worked by the Floridians but were totally unsuccessful. The lone Ohio contact was per ground over about 50 miles. We also picked up the Columbus, Oh beacon (ca 75 miles) all the time.

### The log is below:

Bellbrook 5A-OH. Field Day 2017, Sat 6-24 + Sun 6-25..... 6-m Station (50.100.....50.200 MHz)

W8DGN, Operator: WB8IFM, Gerd

3 el at 25 feet, hand rotated, PWR 100W

Saturday				17) 9:55	KB4ABE	1B	NFL
1) 16:18	K1RK	2A	EMA	18) 10:05	N4OX	1E	NFL
2) 16:21	N1ERC	3A	EMA	19) 10:25	N4UF	1B	NFL
3) 16:26	NK1LC	1D	EMA	20) 10:32	W4DNQ	1D	NFL
4) 16:29	K1MMA	1D	Conn	21) 10:35	K4HRS	2A	SFL
5) 16:32	K8TQK	1D	OH	22) 10:40	N8EYF	1A	SFL
6) 16:34	W1HP	1A	EMA	23) 10:51	W1LY	2A	RI
7) 16:44	NW1B	1D	Main	24) 10:52	WA1LSH	2A	MO
Sunday				25) 11:50	VE1WOW	1D	Maritime
8) 8:38	K4LRA	4A	SFL	26) 12:04	K1RK	2A	EMA
9) 8:42	NA4DC	2A	SFL	27) 12:07	N1FD	7A	NH
10) 8:42	W4A	4A	SFL	28) 12:11	K1B	4B	NH
11) 8:45	WB4SFV	1D	NFL	29) 12:37	N1WRK	1D	EMA
12) 8:49	K1TO	1A	WCF	30) 12:49	N1ERT	3A	EMA
13) 8:59	W4MLB	2F	SFL	31) 12:51	W1CTN	1B	Conn.
14) 9:01	W2GGI	1D	SFL	32) 12:57	WC1SW	2F	WMA
14) 9:02	N4TP	2A	WCFL				
15) 9:14	K4TN	2A	WCFL				
16) 9:26	K9RQ	1B	WCFL				
QRT...QRT... .._._							

## **Triple Treat.**

By Gerd, WB8iFM

A few weeks ago I had a real illuminating experience concerning lightning. There was a thunderstorm in progress and the lightning in the distance was hard not to notice. It was still quite a few miles out and I was starting to count the seconds as you usually do to determine how far out it is. Our house has large windows all around and from where I usually sit at the dining table I can observe the surroundings. Overhead I had a light with one bulb (LED) turned on.

Here comes the (visible) lightning and I start counting. Then, to my surprise, after a second or so the light over me briefly flickers, then after a number of many more seconds, comes the thunder. What was going on? Obviously, the bright white lightning is visible light and we see it practically instantly. The thunder, audible comes many seconds later since sound travels only several hundred feet per second. The flickering light is caused by electricity that is induced from the lightning into our above ground, extensive electric grid. If you walk alongside a power line you find that every other or third pole... does have a ground wire that facilitates these over voltages to drain off into the ground. This process is slower than the speed of light which accounts for the delay.

This voltage can either increase or decrease your line voltage and in rare cases actually do damage to your inventory. I remember one more close call by lightning, years ago where 5 light bulbs were burned out in our house. This happened around 9 pm and the lights were turned on. The TV was also turned on: the picture shrunk, then came right back to full size. So these voltages can cause some damage.

But, it made me think and I consider it a unique experience. So now I get excited, each time another thunderstorm approaches! (Just kidding!)

# Missing Grounds

By Gerd, WB8iFM

We had the extraordinary experience the other night to sit in our living room when lightning hit my tower. It was a big flash and thunder all in one, then some noise as if something fell down. That was it. The light stayed on, the TV was turned off, everything seemed normal, but of course, I was skeptical: need to make the trip to the shack which is in the SE corner of the basement.

All was OK there too. So I said to myself: we got hit by lightning and everything was OK, nothing broke!

The following morning I walked around the house and looked up the tower, everything was still in place. With the noise I had heard I was thinking maybe some piece from an antenna had fallen down. But I didn't see anything missing or anything lying on the ground. Two days later, a Sunday, the xyl walked around the back yard behind the house and suddenly found what had made that noise during that lightning strike. There were several large chunks of bark that had come off a maple tree almost as tall as the antenna tower and not too far away.

Many years ago we were hit by lightning during the night and that is to only time we had someone watching while it occurred. A neighbor was terminally ill with cancer couldn't sleep and was watching my tower through the window. Before she died I was able to briefly speak with her about this lightning and the important fact I learned was that for a long time like maybe 20 minutes small bluish flames were dancing from many spots of the tower to all sides before the big flash occurred.

This effect has been observed on sailing ships in the old days when they were our mode to cross the high seas. You can think of it as lightning is probing for paths to the ground which is where ultimately the lightning bolt will make contact with the ground.

Visualizing this scenario, I realized that my ground connections, the rods or conductors were all located on the south side of the house close to the antenna tower, opposite from the side of the house facing the backyard.

Studying some older literature I had about lightning protection I found a comment that stated, a building should have ground rods on all sides. So I am planning to install two more grounds, connected to my present system to extend protection to the taller trees close by.

Of course, it is possible to install a separate wire in tall trees connected to a ground rod at their base. This is in fact often done in parks with valuable old trees that take a hundred years or more to grow! So in a sense it pays to think about how to go about a reasonable number of ground rods to install and where!

## **First Hamvention in Xenia (2017)**

### **Reflections. By Gerd, WB8iFM**

I got a pretty good feeling after spending almost 4 full days ( Thu through Sun) at this year's Hamvention. This was the first one at a new facility after 52 years at Hara Arena on the edge of Dayton. Xenia, the new location, is 10 miles east of Dayton, clear out in the country. As I write down my impressions, I realize that this is far from giving you a complete picture. As I sort through the brochures, leaflets, business cards, etc that I picked up, more things come to my mind that need further investigation and I am pretty sure we will be busy exploring future Hamventions in years to come. In an article just published in the Dayton Daily News about good old Hara. It was mentioned that since the start in 1956, 5 more buildings were added over the years. This might explain the difficulties of finding your way around over the years. Well, I guess we were lucky this year. There were problems with the rain, especially for the flea market. Good news though: attendance was up, the count reached 29k.

### **How to get there.**

Finding your way to a new place is often a challenge. Here, as you get closer to the venue it really gets bad! So HV has heavily set their bet on free bus transportation from the various remote large parking lots. As an example: coming from Dayton on Rt 35 going East, you get off at Fairfield Rd, aim for the SW corner at the "ex Lofinos" lot. There is plenty of parking and the buses are waiting. There are many other ways, but this should give you a start.

### **HV Food.**

The Food Plaza located in the center of the fair is hard to miss and if the number of places you can eat (19) does not offer something you like, you must be very hard to please. I met a few people who after looking around a bit would exclaim: "There is my favorite food!" Especially on Friday there were long lines almost all day. I guess people were hungry and happy to be there! There were a few more eating offerings toward the flea market area. However, if you were still looking, there was an information booth where you could pick up a map and list of quite a number of local restaurants, maybe just a 5 to 10 minute drive from the fairgrounds. Also the local paper, the "Xenia Gazette" was available free every day and featured special articles about the Hamvention. I could not find anything in the Dayton paper

### **Exhibit Halls**

There were 4 large exhibit halls, named after electronics pioneers: Maxim, Tesla, Marconi and Hertz. Another hall, named for Watt, was not completed in time and was replaced by two large tents. There were some "rain problems" with the tents, but in general it worked out OK. As for the buildings, when it rained, you'd have to make a quick dash from one building to the next.

### **Forums.**

I only got around to the QCWA Forum this time, which was well attended,(counted 52). It was mostly a Q+A session where President Ken Oelke, and Bob Roske, Webmaster, answered questions and explained how the QCWA works. At the end there were a number of door prizes. The VHF/UHF Forum had some interesting topics, which I, however, was unable to attend. I wished the authors would have provided a few explaining sentences. The Hamvention brochure had room for those and most Forums had provided a few lines of explanation, explaining a little more than just giving a headlines, thus whetting your appetite.



## CRESCENT SUPERMOON VS. FULL MINI-MOON:

The Moon's orbit is [an ellipse](#), with one side 50,000 km closer to Earth than the other. This has an effect on the apparent size of the Moon. The lunar disk grows larger when the Moon is nearby and smaller when far away. In the past two weeks we have witnessed two extremes--a crescent supermoon followed by a full 'mini-Moon.' Peter Lowenstein of Mutare, Zimbabwe, photographed them both:



"The size difference was so great, the crescent Moon of May 27th could hold the full Moon of June 9th with room to spare!" says Lowenstein. "I took these photographs from the same location in Mutare using the same optical zoom setting (x60) on the same Panasonic Lumix DMC TZ-60 camera within two hours of moonset."

Some people say that mini-Moons and supermoons all appear to be the same size. After all, there are no rulers floating in the sky to measure lunar diameters, and without reference points to provide a sense of scale, one Moon can indeed look much like any other. However, Lowenstein's photo shows there is a real difference.