

Next Monthly Meeting: Friday March 22 6:30 PM at the MCL Cafeteria in Kettering .
Meeting is always the 4th Friday of the month except for when impacted by holidays

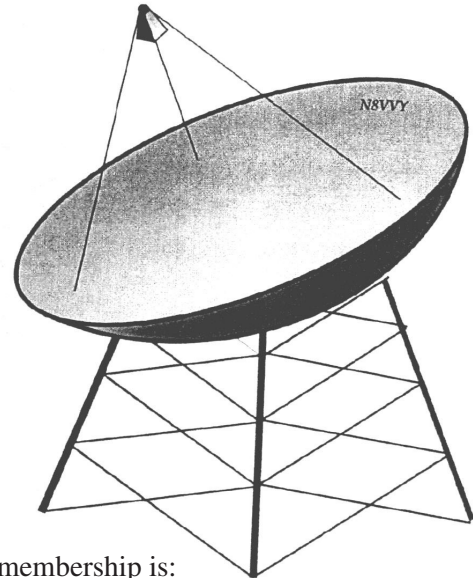
ANOMALOUS PROPAGATION

February 2024

Newsletter of the **Midwest VHF/UHF Society**

Editor: Jim Bacher, WB8VSU

For a Word document template for articles, send a request to Jim (j.bacher@ieee.org) or click on this link to get the Word format Template. Thank you!



Annual membership is:

\$12.00 for newsletter by Email

\$16 if newsletter by USPS

\$240 Life Membership by email

Make checks payable to Midwest VHF / UHF Society and mail to:

Joe Muchnij, N8QOD,
1214 Cottingwood Ct.
Bellbrook OH 45305

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Midwest VHF & UHF Society
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Beacons: 1296.079 W8KSE EM79ur Dayton, OH---- 2W to Big Wheel at 800' AGL.
MVUS Skimmer -. <http://www.reversebeacon.net/dxsd1/dxsd1.php?f=0&c=w8kse&t=de>

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De N8ZM

Here it is, mid-February, and the weather here in SW Ohio has been more like mid-March, with highs in the 40's or better for the last week. The weather pro's have been threatening us with cold and snowstorms for over a week, but so far it has not materialized. Having said that, watch your news feeds for reports of the first ever blizzard cum hurricane to hit this area.

I have confirmation from Daun that the Hamvention flea market spaces have been ordered, including the one for the MVUS booth. Mike, N8QHV, our stalwart booth staffer, has indicated that he will very likely be unable to attend the big show this year, so I'll need some folks to help out with that. An hour or two, or three, spread out over the week-end by a few folks will get the job done. It's a great location in the F/M and a good place to hang out or meet up with other MVUS folks.

I was finally able to reach my contact at the Englewood water tank, but we haven't set a date for an inspection tour. He did confirm that we are welcome to install our beacons and repeaters there. There is apparently a new fall restraint system in place on the ladders which we will have to accommodate, and some uncertainty about how cables can be supported going up 'tube' wall, so our inspection tour is going to be an enlightening experience.

If you haven't heard, well-known and highly successful VHF/UHF op Dave, K1WHS, up in the great state of Maine, has for several years been promoting a 222 MHz activity night on Tuesdays, and the list of stations showing up keeps getting longer each week. If you have gear for 222, get on the air on Tuesday evenings starting about 7 PM, and look towards New England. If there is interest, I'd be willing to make a trek up to the N8GA station with some other ops to try our hand from there. It isn't unusual for there to be contacts made from up Dave's way to parts of the Midwest. Give me a shout if you'd like to try it some week, preferably a few days in advance to make sure my schedule is open.

The MVUS meeting at the MCL is on Friday (of course), the 23rd, at 6:30, or whenever I finish my dinner, so more like 7 PM. Hope you can make it!

de N8ZM

K4RSV's VHF/Microwave Portable Trailer

Author: Joe Burke, WA8OGS

George Presley, K4RSV, is a member of the FL Weak Signal Society (see <http://www.flwss.net>). His present interests are antenna design, AMSAT/FLWSS microwave weak signal communications (EL98im). FLWSS Beacon Manager Staffer in Orlando, FL. He retired from Lockheed Martin in 2006 as CAD PWB Design Engineer.

I met George in the flea market at the Orlando HamCation Feb 9-11, 2024, where he displayed his VHF/Microwave portable trailer. George purchased the trailer used, with both fenders badly rusted and needing replacement. He purchased new fenders at Harbor Freight, and proceeded to upgrade/reinforce the rest of the trailer. Note the nice L-shaped equipment operating table, and the swivel fishing boat chair.



A large car battery sits on the trailer floor under the desk. When on the road (pulling the trailer), this battery is being charged by the car - he connects this cable at the same time he attaches his trailer lights.



The fan inside the trailer in the upper left corner helps cool the operator on those warmer temperature FL days. A green canvas screen covers the back open side of the trailer.



The compact trailer has the antenna mast resting on the floor inside the trailer, and going through the operating table with a compass taped to the table surface.

All of the rf switching is done above the trailer roof, so only one IF coax comes into the trailer, along with one large multi-connector cable (that uses large flat contacts). There is a weatherproof box on the upper side of the trailer protecting these connections.

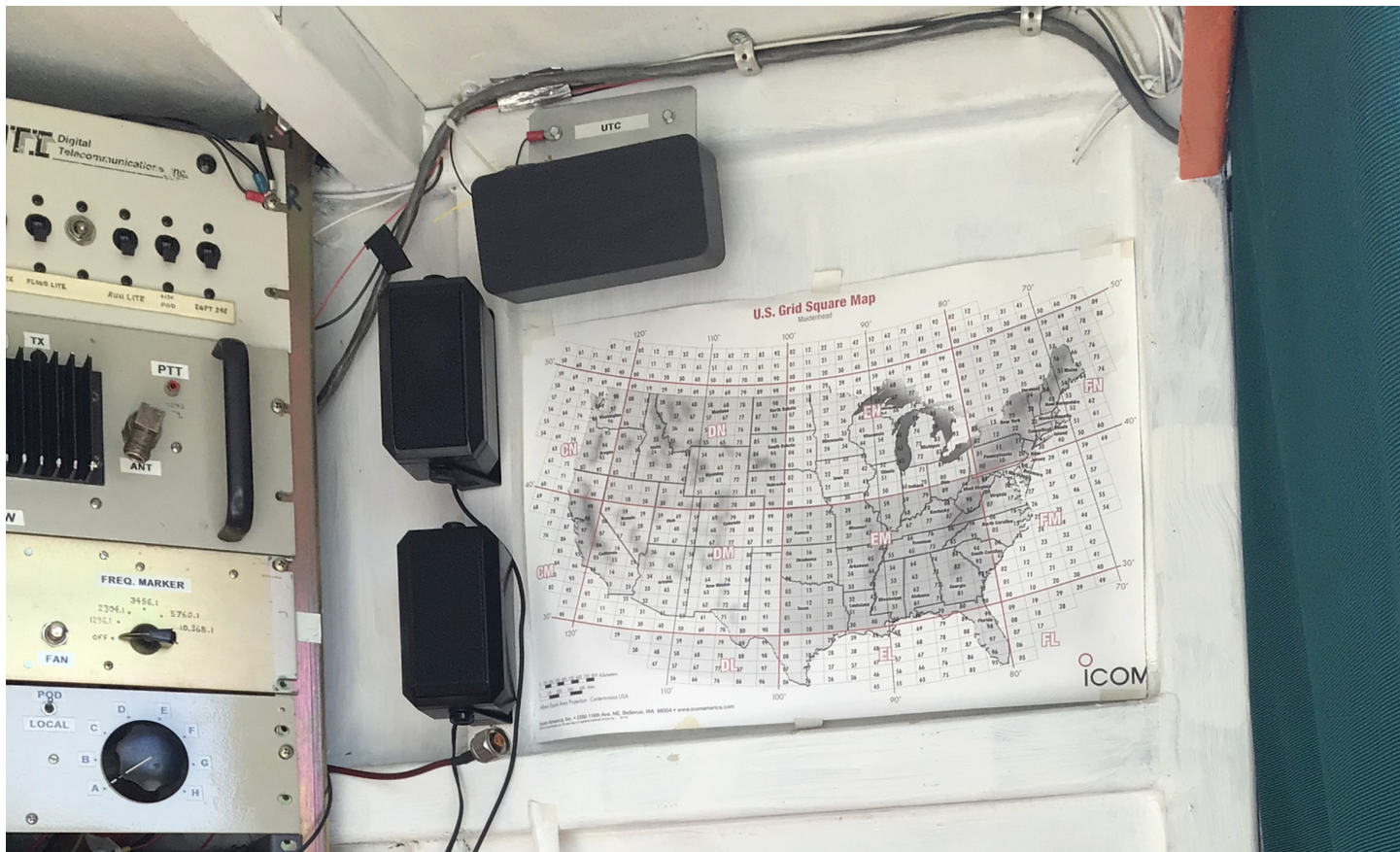


George uses a Cassegrain dish antenna for 10 GHz, which is a dish with an additional reflector that focuses the signal to the center of the parabolic reflector, right into the waveguide feed. The dish is two feet in diameter, and has a gain of about 28 dBd. A jeep spare wheel cover protects the dish when not in use.

A car window motor (or was it a wiper motor?) turns a screw shaft to elevate the dish. George described sometimes aiming the dish just above some far away trees to get refraction far beyond what he can see. He also uses rain scatter to extend his communication range.



George also displayed his portable 10 GHz tri-pod mounted portable station (see picture). He purchases European (11 GHz?) preamps that are previous to the current TV standard, so gets them relatively cheap. He then modifies them for 10 GHz use, with excellent noise figure.



I hope these pictures give you some ideas for putting together a portable station.

MVUS Renewal

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Memberships are prorated by month. So you can send any amount and Joe will adjust your membership accordingly

If you want to pay by PayPal you can send your renewal to Either Tom Holmes, N8ZM or Jim Bacher, WB8VSU and we will get your renewal to Joe.

Tom's PayPal account is: tholmes@woh.rr.com

Jim's PayPal account is: wb8vsu@arrrl.net