

Vol. 19 No. 2

www.mvus.org

February, 2005

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

MeetingS at the old country Buffet !

Our February Meeting is on Fri. the 25th at 7:30 PM

Location: at the Old Country Buffet near SR 725 and Yankee Rd. in Centerville

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****SVHFS conference April 29,30** Details will follow.**

Dayton Hamvention & ARRL Expo, 20,21,22 May, 2005
"Bringing hams together from around the world"

See ad in the February or March QST, pg. 112.

Look up on the Internet www.hamvention.org , order your tickets there using a credit card
or order by mail from Tickets, Box 1446, Dayton, OH, 45401-1446
Ticket Price this year is \$ 20.- A 3-day bus ticket is extra and cost \$ 8.

This year is the 75th anniversary of the founding of the **Dayton Amateur Radio Association (DARA)**
There will be a special event station, call **W8BI** on the air during the month of February!

Corrections. In last month's "This and That" the second item mentions "elevated levels of irreparability" for people living close to cell towers. Although by stretching the imagination this is a possibility, it is more likely the correct word is irritability. Horst, W3/DJ7LC, brought this to our attention.

Another thing happened to the 10/2m net chart submitted by Rod. The software squished the table into a clump and your editor didn't notice! On page 5 a new report is printed with an un-squished table, thanks Rod!

De N8ZM.

As is typical for most writers, I suppose, the toughest part of putting this column together each month is simply sitting down and getting started. That often involves a bit of agonizing over what needs to be covered, and how to lead into it. I recall an old ‘The Far Side’ cartoon by Gary Larsen that was a really lame scenario showing a kid caught inside a hornet’s nest, and the caption was “It was late, and I was tired.” Believe me, I could relate, as I suspect that you can, too.

So much for excuses.

At the last meeting, we heard a good update on the 1296 beacon project from the two Mike’s, Murphy and Suhar, about the antenna development and the status of the installation. The biggest hurdle appears to be coming up with a suitable material for the radome to protect the antenna from the elements, and a discussion of how to keep it in place reliably, as the antenna will be mounted upside down to protect it from falling ice. The installation climb has been put off until the weather warms up, which gives a little bit more time to finish it up. There was a lot of good input from the group, and things are moving forward nicely.

A couple of you have asked about having another tech session, where we can get the instruments and your equipment together to measure performance, do alignments, or even a bit of troubleshooting. The usual format for those has been to pick a Saturday and converge at someone’s house (usually mine) for the day. Pizza, pop, etc is available to get us through the day, and a good time is had by all. With the busy season (a.k.a. Hamvention) coming up, We need to shoot for an earlier rather than later date, unless we want to wait for June or the picnic. I suspect that most of you have built up enough cabin fever by now that sometime in March or early April for an outing sounds pretty good. On my calendar, either March 26, or April 2 look like possible dates, pending obtaining approval from the domestic base commander. The March date is the day after our regular meeting, which might suggest we go with April 2, so that we’ll have a week in between get-togethers. We’ll discuss it this Friday.

I have had a couple of discussions now with the managers at the restaurant, and they seem to be in agreement with the idea of accommodating our ‘dessert only’ folks. It looks like the admission would be in the \$3 to \$5 range for coffee and dessert. I will have the arrangements made for this meeting; just ID yourself as being with the radio club and that you just want to have dessert. And I know I don’t need to say this, but do be honest about it. I think we have a pretty nice place to meet, and I don’t want to jeopardize our relationship. And tipping the staff is also encouraged by me, as they do a good job for us, and try hard not to intrude in our meetings, casual though they may be.

See you Friday! Tom, N8ZM.

This and That 2-05

- **Bird Watcher.** John James Audubon spent months at a time in the wilderness, collecting, drawing and eating his specimen. [Smithsonian Magazine]
- **Earthquake Capital.** Discussing the Dec 26 Tsunami with a friend in Alaska, I mentioned the 1964 earthquake there. That's when he told me that Anchorage has between 6 to 12 (minor) quakes every day by far surpassing all other quake prone areas of the world. This comes out nicely when you check the Internet and look at a map of "to-days quakes". [Steve, K8UD]
- **Shoveling Snow.** With a few heavy snowfalls this winter there have been warnings on TV directed towards older people to beware of exertion and the danger of a heart attack while shoveling snow. To this Andy Rooney said: "They forgot to mention more people die watching TV then by shoveling snow!"
- **Feeding the Hungry.** Give a person a fish and you feed them for a day; teach a person to use the Internet and they won't bother you for weeks. [Andy Rooney]
- **Small Feet.** The average width of a woman's foot is 3.6 inches. What is the average width of a woman's shoe? Is it 3.5 inches, or 3.2 inches or even 3 inches? Don't look! And the answer is: 3 inches. No wonder their feet hurt a lot! [Michael Feldman]
- **\$500 Mac.** Finally a mini Mac with an affordable price tag is on the market. The Mac computers practically have no virus problem, as is the case with Windows versions. You could switch to a Mac "at the risk of breaking out in cold sweat, not knowing what to do with all the money you would have to spend on anti-virus and anti-spy software." [Mathew Fordahl]
- **Lock Mania.** Now, there is not enough locks on the door, People ask for locks on the door that they don't understand. They want a high-security lock that nobody can pick and that they can't get in themselves. [Gary Mangione]
- **Witchcraft.** Politicians promise a lot, but never mention the side or after effects. Just as "you can kill a flock of sheep with witchcraft, provided you also feed them arsenic." [F. M. Voltaire]
- **Antenna Work.** What does a ham get when he falls off an antenna? A Mega Hurtz! [Garrison Keiler]
- **Management.** What the best bosses know is that the best employees always know. They know that they are being managed and smile, knowing just how to manage to ignore it. [Dale Dauten]
- **Mega Cities** A hundred years ago there were only 16 places on earth with more than a million inhabitants. Now there are 400 including 42 mega cities with more than 5 million. And sometime within the next two years more than half of the worlds 6 billion people will live in cities. [Ode]
- **Plastics.** That was the magic word whispered to the graduate (Dustin Hoffman) in the 1968 Film. Which word of advice would it be today? Would you agree to "memory"? There has been an explosion of larger and larger (in memory terms) hard disks and at the same time they have shrunk in size. You find them now in the small portable I-pod, that every teenager "has to have." But even more remarkable are the tiny non-volatile memories that you carry on your key chain. At present these come in sizes up to one gigabyte, enough to store the contents of a thousand books. [WB8IFM]
- **Multi Tasking.** This is one of the many devilish concepts of the windows system. Either you get confused of what you are doing or the computer does. Most likely both, the machine slows down to a crawl, eventually completely stops working. Only the Ctrl, Alt, Del combination will help or a complete shut down and reboot. Hallelujah! [WB8IFM]

January 2005 VHF Report

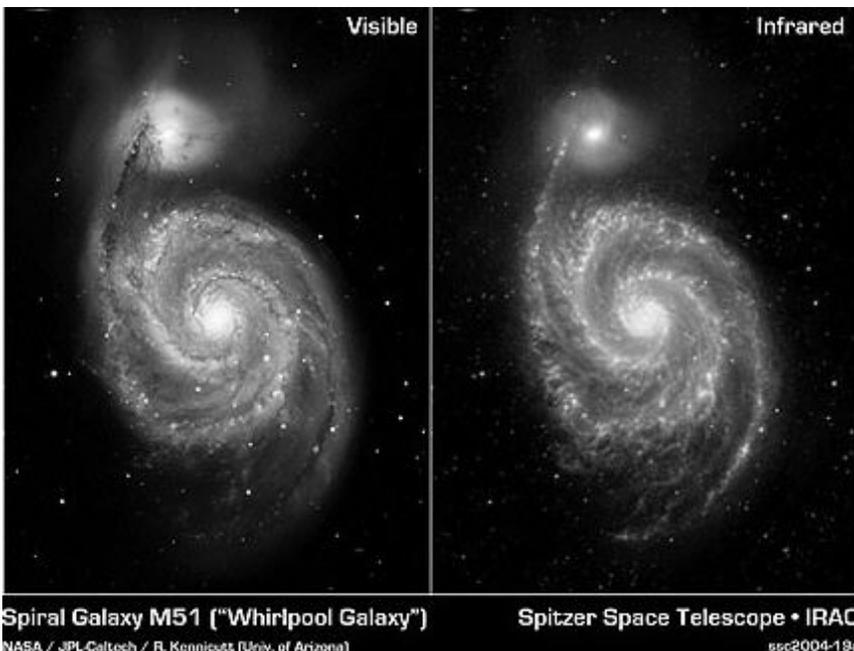
By Lloyd, NE8I Rover

January Madness. Planned a major effort. The weather really messed things up. WX predicted 4 inches of snow, we got 12.5 inches. Friday, got all the rover equipment installed and working. 6M set up a one wavelength loop. Worked really well. Tried to go out Saturday, snowing too heavy and the roads proved really bad. A normal 10-minute trip took over an hour. So, stayed home and made some contacts. Bands seemed dead. Not many stations on. Should have stayed home. I notice in the June '04 contest results, no longer lists the bands used. This makes my rover planning much more difficult. Also, results not printer friendly like it used to be. Wastes too many printed pages.

The cold wx can be really hard on everything. Things tend to fail more. Sunday AM, at least it stopped snowing. First when I ventured out, I found a layer of ice under all the snow. Went back home to wait for the road commission salt and sun to work. 11AM much better. Problem with this amount of snow, most of my normal rover stops, are not accessible. Even some Interstate ramps and rest areas were closed. Decided to drive up to the Flint Mi. 4 corners. EN82/83/73/72. Interstate was in good shape 2 out of 3 lanes drivable. Was able to find places to stop and operate. Activated 4 grids. Heard very little activity. Not much microwave on above 1296. Thanks to all on. Decided to get home before dark, to try and avoid ice on the road issues. On the way home, transmission died. Still in the shop.

Did quite well this time. Did not lose any preamps, power amps, or antennas. However, this may prove to be one of my more expensive rover missions. Not much activity. Dead band conditions. Drove 150 miles, activated 4 grids, operated 8 hours. Claimed 1300 points. 39 Q's 20 grids.

Dearborn Mi 48123-2132 USA ne8i@hotmail.com Grid EN82jm Beverly Hills Mi & Rover 160M - 47GHz



The visible light image comes from the Kitt Peak National Observatory 2.1m telescope, and has the same orientation and size as the Spitzer infrared image, measuring 9.9 by 13.7 arcminutes (north up). Also a four-color composite, the visible light image shows emissions from 0.4 to 0.7 microns, including the H-alpha nebular feature (red in the image).

First Peek at Spitzer's Legacy: Mysterious Whirlpool Galaxy

NASA's Spitzer **Space Telescope** has captured these infrared images of the "Whirlpool Galaxy," revealing strange structures bridging the gaps between the dust-rich spiral arms, and tracing the dust, gas and stellar populations in both the bright spiral galaxy and its companion.

The Spitzer image is a four-color composite of invisible light, showing emissions from wavelengths of 3.6 microns (blue), 4.5 microns (green), 5.8 microns (orange) and 8.0 microns (red). These wavelengths are roughly 10 times longer than those seen by the human eye.

For more fascinating pictures see:

www.spitzer.caltech.edu/Media/

mediainages/data.shtml

More about the very long wire dipole

(See also the January 05 Newsletter: Port 4 Operation)

By Rod Owen, WG9F

I have previously not mentioned the results of the **HF operation** with the long dipole from the Florida location. Some V/UHFers may be interested in that aspect. I have checked HF propagation with Mike, KA8ABR, from his Dayton QTH to the portable Tampa location. Prior to 2004, we have been able to conduct QSOs on all eight HF bands from 80 to 10 meters, including the three WARC bands. The path is open on different bands at different times of the day, but not always when you would expect it, and there have been many surprises. On one occasion, we were able to QSO on all eight of these HF bands in one 24 hour period, and on several occasions we had excellent propagation on 10 or 12 meters many hours after dark, when those bands had been dead in the daylight. (Shades of VHF here !)

Other support structure ideas.

You may recall that in earlier "Anomalous Propagation" articles I have mentioned my liking for "Radio Shack" TV antenna masting for portable operations. This is sturdy enameled steel tube, about 1¼" dia, available in 5 ft and 10 ft lengths which will plug end-to-end and make a very firm mast. In the past I have plugged together 3 x 10ft sections and 1 x 5ft section to make a free-standing 35ft wire antenna center support pole. This is quite stable for temporary portable use when the lower 4ft of it is lashed firmly to a secure wooden fence post.

If there is no handy fence post, take an 8ft treated 4x4 and bury it about half way in the ground. You can do this quickly and easily with an auger-type post hole digger.

Assemble the masts horizontally on the ground. If you incorporate a 5ft section, have it as the top section. Do not use more than one 5ft section in a stack. Clamp a pulley block to the top of the top section with a worm-drive hose clamp, and string the pulley. Set the bottom of the stack against the post and walk it upright from the horizontal position. Have someone ready to clamp or lash it to the post before you start this process. Pull up the antenna center insulator with the string and pulley, and tie it off at the post.

This type of tube-stack support could also be used for end supports if no trees were available. Use pulley blocks at the end supports also. Once you have done this a couple of times, the antenna will go up very quickly. I have always used nylon string and have never found end insulators to be necessary at power levels of 100 W or less.

MVUS Sunday Net.

By Rod, WG9F

For general information only, here is a matrix of participation in the Sunday net, there were 9 check-ins on Sunday 16 Jan. It turns out that there are quite a few VHF/UHF enthusiasts in the CATT organization. I have been telling them about our Sunday VHF/UHF net occasionally on the CATT net, and several have been calling in, so I put it in my recent CATT mailing, which you have probably seen by now. Most of last Sunday's net was actually on 144.280 Mc, we only went to 28.960 Mc for a while, for those who could either not hear everyone on 144.280 or did not currently have an operating 2 m system, though most of us monitor both bands simultaneously. The list is ordered by check-in sequence.

Sun 16 Jan 2005

	28.96	144.28	MVUS	CATT
WG9F	X	X	X	X
KA8ABR	X	X	X	X
KJ8K	X			X
W8DQ	X	X		X
K8IZK	X			X
WC8E	X			X
W8JAQ	X	X	X	X
WB8DNO	X	X	X	X
WB8GZX	X	X	X	X

Sri! This matrix was all messed up in the January newsletter. This should come out right.

Four Days In May (FDIM)

By Mike Suhar, WB8GXB

What are you doing the **Thursday before Hamvention?** If you like homebrew and QRP the FDIM seminar may be for you. The seminar is sponsored by the **QRP Amateur Radio Club International**. The past few years I have attended this seminar. It runs from approximately 8 am to 5 pm. Speakers present topics on a variety of subjects. Even if you are not into QRP the presentations provide useful hints on construction practices and other topics. This year the event moves to a new location. It will be at the Holiday Inn in Fairborn. See their web site for details on the event. You can register on their web site for the seminar. At the time of this writing registration for 2005 was not open but I suspect it will be soon. Go to their web site: <http://www.qrparci.org> and look for the "FDIM 2005 –Dayton" link.

Looking for a Frequency Counter?

If you have always reached for the nearest Amateur Radio magazine or catalog from your favorite electronics store when searching for a counter you may be missing another source. Frequency counters from commercial service are appearing on the second hand market. **EBAY** and news groups such as rec.radio.swap and others provide a source for this equipment. I was looking to upgrade my frequency counter. Looking on EBAY I discovered a good selection of HP universal counters. My first need was a general counter for under 1-GHz. There are two HP models currently showing up on EBAY on a regular basis. The HP5334A (or B) and the HP 5335A. These counters are considered universal because they do more than just frequency. They do time interval, period and other counting tasks. The base unit is 100 MHz (the 5335A is 200 MHz on one channel) but an option extends coverage to 1.3 GHz.

There are a couple of **options** that are common and desirable. The 1.3 GHz option if you need the higher frequency. An oven time base is another common option. The third is full IEEE-488 (GPIB) programming interface. This can be very useful for automated or data collection tasks. A standard feature is the external time base input on the back. This is a 10-MHz input. You can improve the accuracy by using an external reference such as a Z3801 GPS receiver with the built in 10-MHz standard. The oscillator is slaved to GPS to maintain frequency. On EBAY the counters change hands for \$175 to \$225. Sometimes I see higher prices but those auctions end without takers. The down side is there are no manuals with these units in most cases. Manuals can be found but they can be expensive at \$70 or so.

Need a higher frequency?

The EIP 548A microwave counters are showing up on EBAY. The 548 counts 26.5 GHz to 1-hertz. The EIP 545 is lower in frequency. Options provide an oven timebase, extended range connections for external mixers (extends coverage to 110 GHz with mixers), and a frequency selective power meter above 1-GHz. Option W36 is the most common for the 548. This option includes the timebase, GPIB, and mixer connections (mixers not included). All units have buttons for the power meter but unless the option is installed the buttons serve no function. It appears the power meter option is somewhat rare. These counters are expensive as they change hands for around \$1,000. As with the HP an external 10-MHz reference input is provided on the back and they don't come with a manual. I found a user/service manual on EBAY but it cost me \$60.

All of these counters offer more precision than units intended for the hobbyist market. They are rather large when compared to the hobby counters as they were designed to mount in a 19" rack. Most of the units come with handles so they can be moved around on the bench. Unless you need the portability, e.g. Optoelectronics counters, consider counters on the surplus market from HP, EIP, and others.