Meeting: Fr 28 June June/July 2013

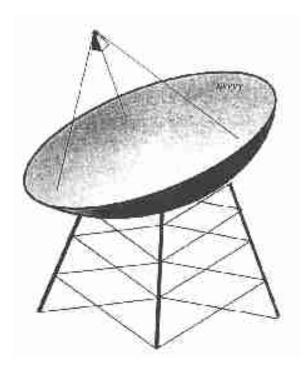
ANOMALOUS PROPAGATION

Newsletter: The Midwest VHF/UHF Society

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Annual Society membership is \$ 12.00. Please make checks payable to Gerd Schrick



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Beacon: 1296.079 W8KSE EM79ur Dayton, OH---- 2W to Big Wheel at 800' AGL.

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The Midwest VHF/UHF Society has noise sources available in two frequency ranges: 50 MHz to 3 GHz, and 3 GHz to 11 GHz. Both versions are fully assembled and tested with ENR data provided. The lower frequency version is currently in stock at \$50 including shipping in the USA. The 11 GHz version is \$95, but delivery is about 8 weeks ARO. Contact N8ZM at n8zm@mvus.org for more details.

MVUS Picnic & Measurement
on Sat 24 August at Daun's,N8ASB

Not to soon to plan for the
October 18/19 Microwave Update
in Morehead Ky
See www.microwaveupdate.org

MVUS Officers

Pres. Tom Holmes, N8ZM
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De N8ZM

Every so often I will be talking to a ham friend that I have known for a while, not always local to Dayton, and I am surprised to find out that friend is an MVUS member and regularly reads Anom Prop! They always have positive comments about our newsletter (note to Gerd: keep up the good work) and even admit to reading and enjoying the lead article written by that tinhorn dictator who is now approaching 20 years as your President (term limits be damned!). I really am a sucker for flattery, you know.

May and Juune have been busy months for me, what with Hamvention, a Caribbean cruise with my wife, daughter, and grandson (his high school graduation present), and then a trip out west for W8PLZ's son's wedding in Colorado then a bit of sight-seeing with Barb. Actually, as I started to write this I was in a hotel room in Loveland, CO, having just returned form the wedding and with plans to hit the road in the morning for the Grand Tetons and Yellowstone (do you have any idea how difficult it is for me not to call it Jellystone?), then maybe stop by Mount Rushmore on the way home. It is a driving trip as we figured we could sleep in my truck once we have finished up here in Loveland and save enough on motels to pay for the extra gas needed. We did sleep in it in Kansas while driving out here and while it wasn't as nice as the Ritz, we did get some sleep and weren't too cranky the next day. So assuming no disruptions to our travel plans, I expect to see many of you on June 28th, our next meeting date.

Which gives me a chance to segue into a discussion of actual MVUS matters rather than the short bio info above. Maybe I should get a twitter account if I want to babble on about stuff like that?

Anyway, our August picnic plans need to get started, so I have asked Daun and Karen Yeagley about once again invading the wilds of Wilmington for our annual event. Daun gave us a date, it is the 24th of August! We will have test equipment available to test your devices, and Gerd tells me there is some interest in antenna gain measurements, so please let us know what you would like to test. I think I can safely say that we will have capability up to 20 GHz available this year. So please let us know if you plan to attend and what devices you would like to have tested.

The MVUS booth at Hamvention had a lot of visitors his year, with many renewing their membership. We also sold 5 Noise Sources! That puts the project in the black. I also must thank those of you who helped out in the booth, especially Mike Schulsinger, who seemed to live there the whole weekend. Thanks, Mike for your great support. I know also that John Human, N8VZW spent a lot of time there, as well as Bob Mathues, K8TQK. Of course Gerd was there to make sure everything ran smoothly. There were others who helped out as well, like W8ULC and W8RKO, and probably others whom I have missed. Thanks to all of you!

Unfortunately, the balloon launch did not happen this year, as the weather did its best to confound us. We might have had a successful flight on Friday, despite the somewhat rough weather, but we chose to scrub that for Saturday when it was expected that conditions would be better. Unfortunately, although the WX was somewhat better, the projected landing zone for the balloon was in downtown Dayton for both Saturday and Sunday, so we scrubbed those launches as well. Hindsight being 20-20, we should have launched on Friday.

As I finish this column, I am in a hotel in Custer, SD, and will be headed out shortly to see Mt. Rushmore. See you guys soon!

This and That 6-13

History. What experience and history teach us is that people and governments have never learned anything from history, or acted on principles deducted from it. [Georg Wilhelm Friedrich Hegel]

Purpose if Life. To be what we are, and to become what we are capable of becoming, is the only end of life.

[Baruch Spinoza]

Ka-Ching! In the not to distant future, can registers will be historic artifacts to be explained to our grandchildren, like rotary phones that once could be found hanging on virtually every kitchen wall.

[D L Stewart]

Bananosecond. The time between slipping on a peel and smacking the pavement. [nn} **Paradise.** America is the paradise of lawyers. [David J. Brewer]

Satan. And God said: "Let there be Satan, so people don't blame everything on me. And let there be lawyers, so people don't blame everything on Satan. [George Burns]

Why the Internet Sucks You In Like a Black Hole. A lack of structural online boundaries tempts users into spending countless hours on the Web. "Checking Facebook should only take a minute." Those are the famous last words of countless people every day, right before getting sucked into several hours of watching cat videos, commenting on Instagrammed sushi lunches, and Googling to find out what ever happened to Dolph Lundgren. [Tia Ghose and LiveScience / Scientific American]

Or, in a Nutshell: You are being distracted from distraction by distraction. & that's the Internet in a nutshell. [from a blog: frankblank 04:08 PM 5/24/13]

Be Kind Rewind. I was reminded of this advice that was printed on the boxes with VCR tapes of movies you used to borrow from the library. We watched "Raiders of the lost Ark" (on a VCR) the other night and at the end I did "rewind!" It took what seemed to be forever! By my estimate it sure was 20 minutes ore more. So, it is understandable that many would skip that step. [Gerd, WB8IFM]

Four Million Sheets. That is how many sheets with information in print form could be stored electronically on a typical 16 GB smartphone hard drive. Figuring one reem with 500 sheets and a case with 10 reems, you've got 800 cases with paper, all filled with information. [Time, 6/10/13]

How did Dad learn so fast? "When I was a boy of 14, my father was so ignorant I could hardly stand to have the old man around. But when I got to be 21, I was astonished at how much the old man had learned in just seven Years.

[Mark Twain]

Bad Weather. Too often man handles life as he does the bad weather. He whiles away the time as he waits for it to stop.

[Austrian Journalist Alfred Polgar]

Digital Con Game. "You young people ought to wake up. By buying into the digital lifestyle. "you've become passive little playthingsof Silicon Valley and Wall Street, screwing yourselves over their profit."

[Jaron Lanier, NY Post]

Article posted on 5-13-2013

International Space Station makes switch from Windows 8 to Linux New operating system provides better performance

In what can only be described as a major achievement for the Linux community, the International Space Station has made the decision to switch dozens of Windows XP-running laptops over to Debian 6 for the purpose of supporting the ISS crew with a wide range of capabilities for day-to-day operations, including location tracking, inventory control, interfacing with cameras, and more.

"We needed an operating system that was stable and reliable — one that would give us inhouse control," said Keith Chuvala, the United Space Alliance contractor manager involved in the switch. "So if we needed to patch, adjust or adapt, we could."

Chuvala is specifically referencing that Linux is an open-source operating system. This means that a community overseeing a Linux distribution like Debian 6 can issue quick notices and patches.

How much faster is a Debian issue addressed than Windows? The operating system's site claims that mail sent over to the mailing list are addressed in 15 minutes or less . . . by the individuals who actually developed the program.

What's more, according to the Debian site, their bug-tracking system is open as well, and the group encourages users to submit bug reports, to which Debian will follow up with them once the bug's been closed. "We don't try to hide the fact that software doesn't always work the way users want," according to the site.

That the ISS is now getting on the Linux bandwagon likely stems from 2008, when station computers were infected by the Gammina.AG. Virus after an astronaut brought an infected USB into orbit. The virus quickly spread and infected other computers on board.

Chuvala and NASA were responsible for making the decision to switch over to Debian. Once the decision was made, the Linux Foundation stepped in with two specially tailored classes for the ISS staff —Introduction to Linux for Developers, and Developing Applications for Linux. The purpose of the classes was to ready staff for the future development of apps specifically as they relate to the needs of the ISS.

"Things really clicked after we came to understand how Linux views the world, the interconnectedness of how one thing affects another," Chuvala said in regard to the training. "You need that worldview. I have quite a bit of Linux experience, but to see others who were really getting it, that was exciting."

Story via: <u>linuxfoundation.org</u> By HYPERLINK "http://www.electronicproducts.com/Profiles/Jeffrey Bausch.aspx"Jeffrey Bausch

From Microwaves & RF, Apr 2013

Vacuum Devices Drive High Power

Vacuum electron devices are still unmatched by solid-state devices at microwave and millimeter-wave frequencies for their output power per device.

By Jack Browne

Vacuum electron devices are still widely used throughout the high-frequency industry for applications requiring extremely high output-power densities.

Vacuum electron devices such as traveling-wave tubes (TWTs) may be considered "archaic technologies" by some—especially in an age of solid-state devices with ever-increasing power densities, such as gallium nitride (GaN) transistors. But vacuum devices still play vital roles in RF, microwave, and millimeter-wave applications across numerous markets, including broadcast, commercial, industrial, and military systems. When the need arises for very high power density at high frequencies, solid-state technology still doesn't come close to the capabilities of vacuum electron devices like TWTs, klystrons, and magnetrons.

For commercial use, satellite-communications (satcom) systems employ a large number of high-frequency vacuum electron devices because of their needs for such high power densities to send high-power signals across considerable distances. But the high power densities afforded by vacuum tube devices are also essential to research applications in nuclear science; medical electronic systems; air-traffic-control (ATC) systems; and military and commercial systems. One of the largest groups of vacuum-tube-based solutions is based on TWT technology and traveling-wave-tube-amplifier (TWTA) devices.

The PC and the Old Man.

By Gerd, WB8iFM

Bridges are being burned, newspapers go under, magazines stop coming. It's the new age where all goes digital and is being sent out on the Web. Now all might be fine if there was order, standards, suitable terminals, in other words a suitable Infrastructure. But this is not so! Of course, there are the younger hams which grew up in this PC age and accept things at face value, go along with it. What they do not realize, that they are young now but will get old...then what?

To summarize: what is wrong with this picture. The PC and the Web are immature! Number one: it saves paper, what a joke. E-mail still hasn't learned the simple command of carriage return. No two: it saves time, another joke. Observing the kids nowadays, they spend lots of time with some gadget on their ear or on their lap. The constant updates. The many new operating systems, change in connectors, etc. Of course, commands, icons, menus are all over the screen and changing. As soon you get used to a one, in fact, live with it and begin to accept it, there is a radical change. As soon as Microsoft bought Skype, menus, labels, icons changed, so you basically got lost and had to relearn or resign because you got tired to keep up and learn new routines. And what happens if you are not using your knowledge on a regulars basis: right! You forget and have to sit down and learn over again.

Eventually you might resign, go back to paper and pencil! Use the mail, pick up the telephone. Of course, you can do this only with your old friends approximately your age, the ones you went to school with. And they keep passing away. Now I understand what my Mother in law meant, when she complained that all her friends were dying. She almost made it to 105. But the last years must have been lonely.

Lightning Storm in June.

Gerd, WB8IFM

A recent super thunderstorm moved through our area in the night (2AM on the 12th of June). I woke up and observed almost continuous lightning. It was such a show, I went to one of our large windows to get a good view of the sky. This lasted for at least one hour. Now, the peculiar thing about this was that there was not much thunder.

A news report the next day reported that there had been 1000 lightning strokes in a time period of only 15 minutes (NBC). Now if you do your arithmetic that comes to more than one stroke per second. The thunder, I estimated was heard only one or two times a minute. Obviously this indicated a vast size thunderstorm where we were only observers on the outer edges. We did get rain (2") but not as much as expected and very little wind. In other areas of the state there were actually a few tornadoes with damages to buildings and trees, uprooted or hit by lightning.

Events like this make you wonder. We the "Masters of this World": how little do we really know and understand about nature and its forces and how they work. In any case, you hear or read these numbers and with the help of a little bit of arithmetic it opens your eyes.

There were pictures in the news that showed in particular damage done to trees. Bark stripped and trunks split.

Once we had lightning damage a very tall tree at our neighbors. We observed the lightning and heard the crack of wood at the same time. But what was most impressive: the shock wave was so powerful, it knocked down a small curtain rod on a door in our house. The tree, an estimated 150' away from our house, had been split in half. It might have been saved by applying a few iron bands holding it together, but the neighbors decided to have it cut down.

Is the computer like a chicken?

By Gerd, WB8IFM

The Computer often "hangs up". It seems to crank and crank then , eventually it stops and comes up with some idiotic message like: "An error has occurred. Check your 'abcd' and try again". In most cases you have no idea what might have really occurred and what is meant by doing "abcd".

Personally I just literally pull the plug, take a deep breath, count to 10, then restart the computer. Low and behold, this works quite often. Sometimes, when it doesn't work on the first "restart" I do it again and that time count to 15!

The whole situation reminds me of a chicken trying to cross a fence. It runs to the left for a distance, then turns around and runs to the right, stops turns around again and so on. If it only ran a little further, there the fence has an opening and it would get through.

Meteor Shower (Gamma Delphinids) By Gerd, WB8IFM

I subscribe to NASA's "Space News". This Internet service follows events in space and on the sun, and sends out short emails with highlights. For example, they report when there is a large eruption (flare) on the sun hurtling a stream of particles towards earth. When, after a predictable time period, these particles arrive and hit the atmosphere, they cause unusual extreme ionization, disturbing the normally beneficial reflection. This results in the poor conditions that make life difficult for hams.

Recently, a meteor shower was announced for the East Coast at 4:30 am EDT on Tuesday 11 June 2013. This shower caught my attention because the corresponding orbiting cloud of space debris of these meteors was first observed in 1930, and it was now passing by the earth again. That year came close to my birthdate, and I had not ever observed a meteor shower during which several meteors are seen per minute or even one every minute. So here was my chance. You could say that this was one for the bucket list!

Well, I set the alarm clock, got up 5 minutes early, dressed and stepped outside the front of the house. From that vantage point I could see a relatively large segment of the sky. However, it was very disappointing. Although the sky was clear, very few stars and only the very brightest were visible. Light pollution was rampant. Also we do have a street light near our house, fortunately mostly shadowed by a tall pine tree. In addition to that neighbors' outdoor lights really made observations difficult.

What a change from earlier years, when nights were dark. When we were kids we always looked forward going out at night and gazing at the moon or all those bright stars. Invariably we would see a meteorite swoop across the sky and suddenly go dark. Then you could make a wish! As I remember, that happened quite often! How sad that children nowadays do not get to see meteors as we did. Only the lucky ones that live way out in the countryside now have this experience.

I kept looking up for about twenty minutes but never did see a single meteorite.

However there is an explanation. Here is what I found on the web: "No one knows the strength of this display or whether it will occur at all. It would most likely be of short duration (less than one hour and perhaps as short as 15 minutes)," writes Robert Lunsford of the American Meteor Society. "This is not something one can stand outside and try to witness. Serious observers should be comfortable in a lounge chair and watch for at least an hour." Now I know!

And the day after there was this report: "Now 12 hours after the predicted outburst of the Gamma Delphinids, from all the correspondence received it is apparent that no strong rates were "seen" anywhere. Interestingly enough, recent **radio rates** have been higher than normal so it remains to be seen whether this is associated with the Gamma Delphinids. The typical observation received by the AMS this morning mentioned none or perhaps one Gamma Delphinid being seen along with several sporadic (random) meteors and a couple of Anthelion meteors (if they were watching for these meteors too)." [Robert Lunsford]

Here the real Thing:

Western Union codes

1	Wait a minute.	25	Busy on another wire.
2	Very Important.	26	Put on ground wire.
3	What time is it?	27	Priority, very important.
4	Where shall I go ahead?	28	Do you get my writing?.
5	Have you business for me?	29	Private, deliver in sealed envelope.
6	I am ready.	30	No more - the end.
7	Are you ready?	31	Form 31 (permissive) train order.
8	Close your key, stop breaking.	32	I understand that I am to
9	Priority business. Wire Chief's call.	33	Answer is paid.
10	Keep this circuit closed.	34	Message for all officers.
12	Do you understand?	35	You may use my signal to answer this.
13	I understand.	37	Inform all interested.
14	What is the weather?	39	Important, with priority on through wire.
15	For you and others to copy.	44	Answer promptly by wire.
17	Lightning here.	55	Important.
18	What's the trouble?	73	Best Regards.
19	Form 19 (absolute) train order.	77	I have a message for you.
21	Stop for meal.	88	Love and kisses.
22	Wire test.	91	Superintendent's signal.
23	All stations copy.	92	Deliver Promptly.
24	Repeat this back.	134	Who is at the key?

Two non-standard codes, rarely-used, were coined within the amateur radiotelegraph service. The <u>Young Ladies Radio League</u> (YLRL) organized in 1939 and quickly coined '33' as "Love sealed with mutual respect and friendship between one <u>YL</u> and another YL". [8] More recently, '72' has been used in <u>QRP</u> operation to signify a '73' sent with reduced transmitter power.

Flag Code

