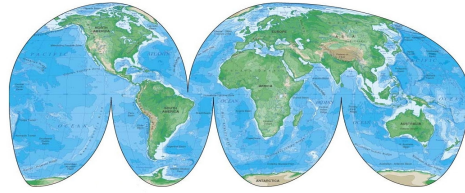


MOUNT VERNON

C



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AMATEUR RADIO CLUB October 2004

MEETINGS: SECOND MONDAY OF THE MONTH AT THE BIG BROTHERS OUTER LIMITS 7:00 PM
REPEATER FREQUENCIES: 146.790 (-) K8EEN 444.750(+) KC8YED
SPEED DIAL #S 7770=AAA (Howard St. Garage) 7771=Sheriff 7773=Police 7776=Highway Patrol
7778=MV Fire 7779=Report Repeater Problem # to shut off Auto Patch

Letter from the Editor

The astute among you will note an error in this month's Vacuum Tube Daze. At the time I wrote it (summer 2003) I didn't know of any sources of single resistors under 0.1 ohm. Since then a source of very low ohmic resistors has come to my attention. Even still these resistors are identified by the "ohm" unit of measurement, not milliohm (not yet anyway) so in practice the nomenclature for resistors remains quite different than for the capacitor as noted in the article.

Steve, KC8YED, had a technical glitch with his crossword generating software so this month's puzzle is again courtesy of the ARRL.

Don, WA8YRS, informs me that he's planning a new Code Class tentatively to be held at 7:00 pm Thursday night at the Mt Vernon library. He would like to start it in early October. Anyone interested please call him at (740) 397-0249 or e-mail him at <wa8yrs@mvarc.net>. Keep in touch with this newsletter for additional details. Don will also have MVARC handbooks at the next meeting. He can email anyone a .pdf version if you send a request to the above email addy. Don will check-mark off people he gives it to and snail mail ones he can't deliver otherwise.

Space, the final frontier. These are the continuing voyages of..... The club newsletter.

This next segment is all about space, or the lack of it, in our newsletter. Mailing restrictions (ie. the stamp) limit the newsletter to 5 printed pages. (printing on both sides that is) As I do my editing the newsletter tends to run 7 or 8 pages each month and this looks to be very consistent from month to month. To solve this problem and to create an incentive for visiting the club website, it has been decided to snail-mail a truncated version of the newsletter while the full version will be posted at MVARC's website. This will permit the 5 page core of the newsletter to be sent in the usual way each month while allowing the rest of it to grow with the demands of that month's information.

Reminder: November Sweepstakes is 6 - 8th for CW and 20 - 22th for phone. This is the premier on-the-air contest for hams.

Phil
N1GTZ

Attendance

September 13, 2004

Monthly Meeting

Name

Call

email (if not already on record)

1. Phillip Buble

N1GTZ

2. Jeff Butz

N8SMT

Meeting adjourned at 7:44 pm local time.

50/50 drawing was won by Mike, KC8YLD

2855 Apple Valley Drive
Howard, Ohio 43028-9382
Phone: (740) 393-0970
(740) 398-1277

Cellular:

Email: bobmcbridesr@earthlink.net Robert J. McBride, Sr.
bobmcbridesr@yahoo.com

Knox County Emergency Coordinator
Monthly Report: ARES August 2004

Amateur Radio Emergency Services

Another record set month in 2004 August has had a record amount of rain and record cool temperatures. Goes to show that weather is hard to predict.

Now that August is over the new month of September will have some important events. The ARRL ARES Meeting will be at 9:00AM on the September 18, 2004. On the same day is the annual race of the Centerburg Farm Festival at the same time. We will need people for the race. My assistant Emergency Coordinators and I should try to make it to Columbus at The Ohio Emergency Management Office on State Route 161 West - East of Sawmill Road. Please, remember to check in to the Sunday night ARES Nets at 9:00P.M. I apologize for not having the check-ins listed. I will try to have the update for next month.

The Sunday night ARES nets schedule is as follows:

First Sunday Net Control: N8QPM Bob McBride, Sr.
Second Sunday Net Control: KC8WXL Jeff Hall
Third Sunday Net Control: KB2SAI Ruben Clark
Fourth Sunday Net Control: N1GTZ Phil
Fifth Sunday Net Control: KB8TEX Dan Crowthers

1. Please remember the tornado sirens will be tested the first and third Fridays each month at 12 :00 PM. We need NET Controls who can do check-ins for these nets. If you are available and you do not hear anyone else on the repeater, please take check ins and send me a report on all that checked in.

73's from N8QPM and have a good month!

Repeaters and Stuff
By Don Russell

Okay, I am now convinced that I should not miss any more meetings! First you guys cannot get in the door; then you talk about remote receiver sites behind my back! What is a ham to do?

Seriously, I would really love to put a couple of receive sites around Knox County. I have so far resisted the urge to do so for two reasons. One is the cost to the club. Just one receiver site would cost around \$700 minimum. This is using used equipment everywhere but the feed line and antenna. Add to this cost about \$200 in added equipment at the 2-meter repeater site to make it work. I never felt justified in asking the club to spend close to \$1000 on such a project. The other factor is the technical side of things and perhaps a bit selfish on my part. I really don't enjoy trouble shooting repeaters. Our 2-meter repeater is mostly trouble free, so I can deal with things that happen once in a while. The more equipment that is added to a system, the more technical problems. I really don't want to deal with weekly system problems.

That being said, there are a couple of ways the club could go about satisfying the desire to have remote receiver sites. One would be for the club to install a 440 Mhz. receiver at the 2-meter repeater, along with an omni directional antenna for 440 Mhz. Then individuals or groups that desire a remote receiver site would be responsible for setting up their own receiving site that would transmit back to the repeater on 440 Mhz. This group would be responsible for the cost and maintenance of their receiver site. The club would have to approve each receiver site before being allowed to connect to the repeater. In places that have many club members, the club may offer to help with the cost.

A possible solution for Apple Valley (where the proposed receiver site would be) is their own UHF repeater, independent of the Mt. Vernon Repeater. This repeater would have the capability to link with the Mt. Vernon Repeater when desired. This way hams in Apple Valley could keep in touch with each other. When they wanted to talk to Mt. Vernon, they could link their repeater to the 2-meter repeater using a simple touch tone. Like "*" for "link up" and "#" for link down. Simple. Hams in Mt. Vernon would link with the Apple Valley repeater the same way since both repeaters would always be listening to each other. Such a system would require a 440 Mhz. transceiver at the 2-meter repeater site. The cost would be no more than for a receiver site mainly because a receiver site is nothing more than cross-band repeater. The downside to this idea is that hams in Apple Valley would have to upgrade their equipment to include 440 Mhz.

During a discussion on the remote receiver sites, Ruben (KB2SAI) thought perhaps the internet could be used in a remote receiver site application. This is food for thought. It would solve a lot of problems associated with remote 2-meter receiver sites, but also create new problems. The cost may or may not be lower. If one of the hams at Apple Valley had a broadband connection and was willing to be home of the remote receiver, it could be done rather cheaply. I for one would insist on redoing our internet link so that the transmitter link to the repeater was on 440 Mhz. There are reasons for this I would be happy to discuss with anyone interested. Not enough space here to go into it in detail. Perhaps at the meeting.

Have a safe and fun October.

A Pause for Thought

There is no Silence in the Earth - so silent
As that endured
Which uttered, would discourage Nature
And Haunt the World (1004)

Emily Dickinson (1830-1886);
numbered in T.H. Johnson, editor, *The
Complete Book of Poems of Emily
Dickinson*, (Little Brown and Co., 1955)

Vacuum Tube Daze

A Tongue-in-cheek look at the days when tubes ruled.

By Phillip Buble, N1GTZ

Episode 3: When capacitors were condensers.

Call me anything you like just don't call me Johnson. Well things are not quite that bad in radio circles but it's pretty bad. Take the nomenclature we use for frequency. Please. Low Frequency (LF), Medium Frequency (MF) and High Frequency (HF) bands cover everything from 30 kHz up to 30 MHz. Even while our toys, microwave ovens and cordless phones of all kinds use 900 to 2400 MHz we still call 5 MHz "high frequency." This is a joke but the nomenclature established nearly a century ago sticks. Like "dialing" a telephone when a



telephone hasn't had a dial in decades. Will we still be dialing a telephone 50 years from now? Everything below 30 MHz is low frequency by modern standards but will continue to be officially called high frequency for some time to come I suspect. Even still I sometimes slip and call it low frequency.

Equally bad was the nomenclature for condensers. The carrier of resistance was always a resistor and inductance always an inductor. How the carrier of capacitance became a condenser I'll never know. (along with the word "flammable") The standard unit of capacitance is a Farad but very, very few people have ever seen a Farad all in one place at one time. I have only once. A Farad remains large even in this day of low voltage circuitry. Due to the nature of tube type circuits very small values of capacitance were needed capable of handling very high voltages and at the time these were called mf and mmf for millifarad and milli-millifarad respectively. Fortunately in this case common sense ruled over the years and standards for such small values established. These are now called mf, uf and pf for millifarad, microfarad and picofarad respectively. The word "condenser" was thankfully dropped in favor of capacitor to bring it into line with the rest. So sanity sometimes reigns! (Mr. Farad would be pleased - or is it Sir Farad?)

Resistors never had this problem but the reverse. The standard unit of resistance is the Ohm and 1 Ohm is indeed a low value of resistance. Sometimes modern circuitry needs resistance lower than a Ohm but not by much so the terms milliohm and microhm are rarely if ever encountered. I never have in any event nor do I know anyplace where I can purchase a single resistor below 0.1 Ohm. Exactly the opposite, especially with tube circuits, high values were needed so in the tube days kilohm and megohm resistors were common as they have become again with the abundance of CMOS circuitry. In rare cases even a gigohm of resistance may be called for. (my DMM has just one scale with 4 gigohm input impedance. I'm still not exactly sure why. Its Ohm's scale will measure up to 1 gigohm and beyond)

Inductors are the one item in which its unit of measurement is even close to being midway to what could actually be purchased in individual components back during the tube days. Back then there were no fancy smancy intergrated circuits to help filter power supplies. Filtering power supplies required using both inductors and capacitors and the inductor may have needed to be 25 or 30 or more Henrys' in size. Also called "chokes" or "swing chokes" the Henry is the inductor's unit of measurement. Just the same, and in the same appliance, components with millihenrys or microhenrys might be needed - it depended on the circuit.

The End.

You might be a digital ham radio operator...

- ...If you introduce your wife as -mywife@home.xyl-.
- ...If you have used coat hangers and duct tape for something other than hanging coats and taping ducts.
- ...If you window shop at Ham Radio Outlet.
- ...If your ideal evening consists of flipping through the latest QST mag looking for technical inaccuracies.
- ...if you spend more time on the internet ICQ than you do on the ham bands.
- ...If you like to run new software programs before reading the manual.
- ...If you thought the concoction ET used to phone home with was stupid.
- ...If your HT has more computing power than your PC.
- ...If you have ever saved the power cord from a broken appliance.
- ...If you are old enough to know what an 807 is.
- ...If the salespeople at Circuit City can't answer any of your questions.
- ...If you have a habit of destroying things in order to see how they work.
- ...If the microphone or visual aids at a meeting don't work and you rush up to the front to fix it.
- ...If you have more friends on the 20 meter band than in real life.

...If you've ever tried to repair a \$5.00 radio.
...If your favorite part of the 6 o'clock news is comparing their latest satellite weather picture with yours.

Thanks to Griff NB6Z

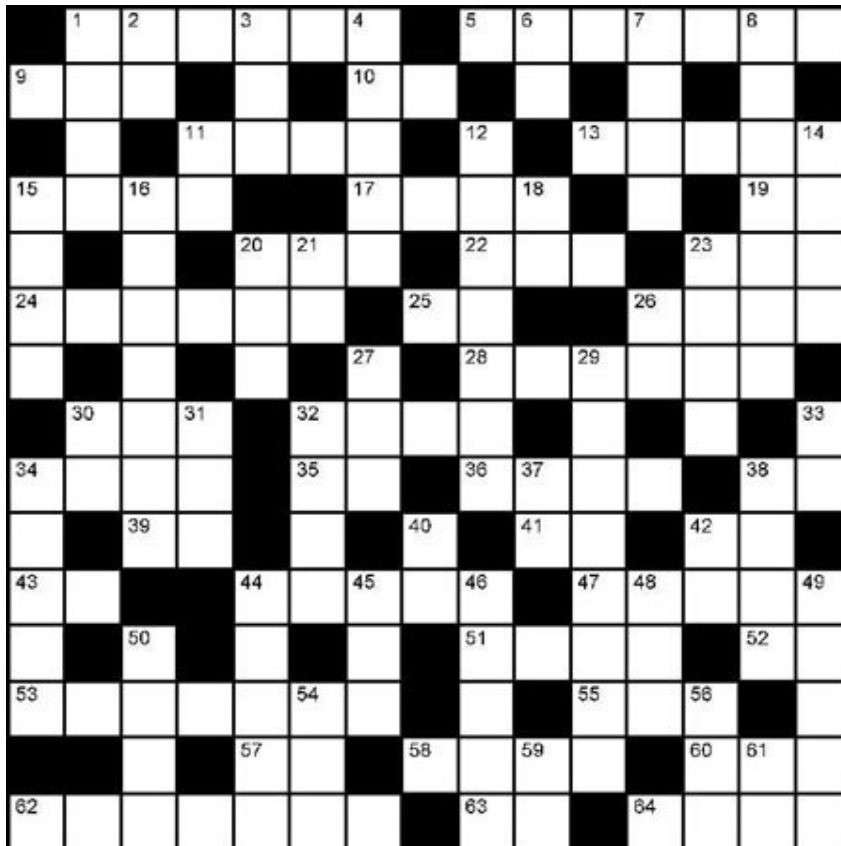
And for something completely different:

The ARRL is seen as a strong advocate for Amateur Radio's interests. It brightened the day a few weeks ago when one of our BPL opponents resorted in frustration to name-calling, referring to us as "a misinformed set of armchair amateurs that still use vacuum tube transmitters."

My response was simple: Amateurs built the Ark. Professionals built the Titanic.

David Sumner, K1ZZ
Chief Executive Officer

"It's a Bird, It's a Plane, It's an Antenna!"



By H.
Ward
Silver,
N0AX

Across

1. This always comes first
5. Recover from damaged items
9. Type of screw head
10. Horizontal direction (abbr.)
11. Set of tools
13. Throws a shot
15. Agency in charge of safety (acronym)
17. Accidentally let fall
19. Transmitter output (acronym)
20. Type of plastic pipe (acronym)
22. Utilize
23. A contest category using spotting assistance (acronym)
24. Wheel used for lifting with ropes
25. Answer only (Morse prosign)
26. Feeling good
28. Found with a block
30. Gentle blow
32. A heap of stuff
34. Difficult
35. What goes down must go here first
36. Ladder step
38. That (Morse abbr.)
39. Determining direction (acronym)
41. Makes time with 37 Down
42. End of message (Morse prosign)
43. Supposing
44. Raise yourself on a structure
47. Rebuild or repair
51. Type of relay
52. Unit of inductance (abbr.)
53. Wrap guy wire around these
55. Short pull
57. Internal receiver signal source (acronym)
58. What the tower sits on
60. Type of organic antenna support
62. Unusual or unorthodox devices
63. Metric distance (abbr.)
64. Divulge a secret

Down

1. Antenna wire stretches and
2. One of several
3. Loop or hole
4. Cubic measure of volume
6. Most conductive metal (chemical symbol)
7. Unit of potential
8. Used for lifting on a tower (two words)
11. Gauge (abbr.)
12. Type of weight that provides tension
14. Desired outcome
15. What you say after 17 Across happens
16. A rope for raising or lowering
18. Comes after the signature
20. Large mail-order ham radio vendor (acronym)
21. Near or against
23. Take care of your....
26. Weak (abbr.)
27. Tear
29. Foundation material
30. Technical Field Organization appointment
31. Type of computer document (acronym)
32. Apply tension
33. Quiet (abbr.)
34. Lift with a rope or cable
37. Makes time with 41 Across
38. Cut to length
40. Greeting before noon (Morse abbr.)

- 42. One of the continents (abbr.)
- 44. Coaxial feedline
- 45. Forms on antennas in cold weather
- 46. Separate by force
- 48. Web address abbreviation for colleges
- 49. Hit this with a hammer
- 50. Attached with a knot
- 54. More than a little
- 56. Form a flexible solid
- 59. Scandinavian prefix, neighbor to 61 Down
- 61. Scandinavian prefix, neighbor to 59 Down

FREQUENCY USAGE: MT. VERNON, OHIO

<u>FREQUENCY</u>	<u>DESCRIPTION</u>
31.3600	MT VERNON BOTTLED GAS INC
33.8600	KNOX COUNTY OF
33.9600	KNOX COUNTY OF
35.0200	MORTELLARO JOSEPH J; MCDONALD S OF PATAJKALA; JKB RESTAURANTS INC DBA MCDONALD S OF PATASKALA
35.1400	BENDER COMMUNICATIONS INC; PIAR BILL
37.9600	KNOX COUNTY OF
39.9800	KNOX COUNTY OF
43.1200	ELLIS BROTHERS INC; ELLIS BROTHERS CONCRETE INC
72.5400	KNOX CTY SEWER AND WATER DEPT; KNOX COUNTY OF
150.8150	HOWARD STREET GARAGE INC
151.6250	COOPER ENERGY SERVICES
151.6550	BALCOM BROTHERS ROOFING
151.7450	ALLEN GLENN
151.8050	ON SITE SANITATION
151.8950	HEATON APPLIANCES INC
151.9250	MOUNT VERNON HIGH SCHOOL
152.2700	PALCO INTERPRISES INC; MID OHIO TRANSIT AUTHORITY
152.9075	BC COMMUNICATIONS; KNOX COUNTY HEAD START
153.0350	C T S INC
153.4250	OHIO CUMBERLAND GAS COMPANY
153.7550	Business Radio Licensing; MOUNT VERNON CITY OF
153.8450	PROFESSIONAL LICENSING CONSULTANTS; KNOX COUNTY OF
153.8900	KNOX COUNTY FIRE CHIEFS ASSOCIATION
153.9050	VASU COMMUNICATIONS INC; KNOX COUNTY OF
154.2650	KNOX COUNTY FIRE CHIEFS ASSOCIATION
154.2800	KNOX COUNTY FIRE CHIEFS ASSOCIATION; PALCO ENTERPRISES INC; MOUNT VERNON CITY OF
154.2950	KNOX COUNTY FIRE CHIEFS ASSOCIATION
154.3250	KNOX COUNTY FIRE CHIEFS ASSOCIATION
154.3850	PALCO ENTERPRISES INC; MOUNT VERNON CITY OF
154.5700	COOPER ENERGY SERVICES; PRINTING ARTS PRESS INC
154.6000	MORTELLARO JOSEPH J; PUBLIC LIBRARY OF MOUNT VERNON KNOX COUNTY; MCDONALD S OF PATAJKALA; JKB RESTAURANTS INC DBA MCDONALD S OF PATASKALA; PRINTING ARTS PRESS INC
154.7400	PROFESSIONAL LICENSING CONSULTANTS; KNOX COUNTY OF; PALCO ENTERPRISES INC; MOUNT VERNON CITY OF
155.3250	KNOX COMMUNITY HOSPITAL
155.3700	PROFESSIONAL LICENSING CONSULTANTS; KNOX COUNTY OF; PALCO ENTERPRISES INC; MOUNT VERNON CITY OF
155.8050	KNOX COUNTY OF
155.9250	Business Radio Licensing; MOUNT VERNON CITY OF; VASU COMMUNICATIONS INC; KNOX COUNTY OF
155.9700	PROFESSIONAL LICENSING CONSULTANTS; KNOX COUNTY OF; PALCO ENTERPRISES INC; MOUNT VERNON CITY OF
157.5300	PALCO INTERPRISES INC; MID OHIO TRANSIT AUTHORITY
157.7400	COOPER ENERGY SERVICES INC
159.0450	PALCO ENTERPRISES INC; MOUNT VERNON CITY OF
159.3300	PROFESSIONAL LICENSING CONSULTANTS; KNOX COUNTY OF
163.2500	OHIO STATE OF
451.2625	VASU COMMUNICATIONS INC; MOUNT VERNON CITY OF
451.7000	PALCO INTERPRISES INC; MID OHIO TRANSIT AUTHORITY
453.6750	KNOX COUNTY OF
453.7250	BENDER COMMUNICATIONS; OHIO STATE OF
456.7000	PALCO INTERPRISES INC; MID OHIO TRANSIT AUTHORITY
458.0375	TWO WAY RADIO INC; KNOX COUNTY OF
458.6750	KNOX COUNTY OF

458.7250 BENDER COMMUNICATIONS; OHIO STATE OF
 458.8500 BENDER COMMUNICATIONS; OHIO STATE OF
 460.5125 KNOX COUNTY FIRE CHIEFS ASSOCIATION
 460.5625 KNOX COUNTY FIRE CHIEFS ASSOCIATION
 461.4125 COOPER ENERGY SERVICES
 461.5375 COOPER ENERGY SERVICES
 463.5250 Hunton Williams LLP; ROSS BROTHERS WASTE AND RECYCLING
 CO
 463.9750 Business Radio Licensing; BLUBAUGH BODY AND FRAME INC;
 KNOX COUNTY D H S; BEAVER DAN
 464.0500 ASHLAND PETROLEUM CO; HAWK ROBERT
 464.2250 Electrocomm Columbus Corp; Mount Vernon Nazarene
 University
 464.2500 BRENNEMAN LUMBER COMPANY; Hunton Williams LLP; ROSS
 BROTHERS WASTE AND RECYCLING CO
 464.3250 KELSEY HAYES COMPANY
 464.3750 B C COMMUNICATIONS INC; KNOX COMMUNITY HOSPITAL
 464.5250 FEDERAL LICENSING INC; ROLLS ROYCE ENERGY SYSTEMS INC
 464.6250 Electrocomm Columbus Corp; Mount Vernon Nazarene
 University
 464.7000 BENDER COMMUNICATIONS INC; MOUNT VERNON CITY SCHOOLS
 465.2875 PROFESSIONAL LICENSING CONSULTANTS; KNOX COUNTY OF
 465.5625 KNOX COUNTY FIRE CHIEFS ASSOCIATION
 468.9750 Business Radio Licensing; BLUBAUGH BODY AND FRAME INC;
 KNOX COUNTY D H S; BEAVER DAN
 469.0500 ASHLAND PETROLEUM CO; HAWK ROBERT
 469.2250 Electrocomm Columbus Corp; Mount Vernon Nazarene
 University
 469.2500 Hunton Williams LLP; ROSS BROTHERS WASTE AND RECYCLING
 CO
 469.5250 FEDERAL LICENSING INC; ROLLS ROYCE ENERGY SYSTEMS INC
 469.6250 Electrocomm Columbus Corp; Mount Vernon Nazarene
 University
 469.7000 BENDER COMMUNICATIONS INC; MOUNT VERNON CITY SCHOOLS
 10525.0000 MOUNT VERNON CITY OF

Revised: Sun Aug 1 01:33:36 2004

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Solution to last month's Crossword Puzzle

=====

Membership Form

Club dues run from Jan. 1 until Dec. 31 and are collected during the last quarter of the year. You can mail in the dues to the address below or bring them to a meeting.

Dues Schedule:

\$20 regular

\$10 for second member in the same family

\$10 for over 65 yrs. of age

\$15 for those living outside Knox County

Mt. Vernon Amateur Radio Club

P.O. Box 372

Mt. Vernon, OH 43050

Name_____Call-Sign_____

Street_____

City_____State____Zip Code_____

Phone Number_____License Class_____

ARRL Member (Y/N)_____E-Mail_____

Extra Donation (Optional)_____

Members are entitled to a free MVARC E-Mail address. Would you like one? No_____Yes_____

If yes please enter password_____

Other Comments_____

Classifieds

Only Need to Ask, Inc
3851 Columbus Road
Centerburg, Ohio 43011

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740-625-6649 fax

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2way radio Sales & Service

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Ham Stuff for Sale

Jack Parker called the house the last month and wanted me to come and pickup all his ham gear. Here is a list of the stuff I have at the house to be sold and the money will be going to the club.

- 1)Commodore 64 computer with tape drive and monitor.
- 2)Heathkit Ultra Pro CW Keyboard
- 3)Heathkit Antenna Tuner with Antenna Switch mounted on the side
- 4)MFJ Signal Enhancer SSB/CW Filter Mod #. MFJ-752B
- 5)MFJ RTTY/CW Computer Interface Mod # MFJ-1224
- 6) Extension Speaker
- 7) Box Of Misc. Stuff. Cables, filters, antenna switch, soldering gum, soldering iron and multi outlet strip.
- 8) 2 meter Ringo Ranger base antenna
- 9) MFJ-1796 Vertical HF antenna

There are books for just about everything that needs one.

The last 2 items (antennas) are both still at Jacks house and need taken down. (easy job) all the rest of the stuff is at my house.

I also still have a complete Satellite Station that I would like to see someone else get enjoyment out of. There is close to \$7,000 worth of stuff but you can get it for a whole lot less (make offer)

I don't want to keep moving this stuff around so if you want

something give me a call on my cell phone anytime and leave a message 358-1169

Bob Bruff N8PCE

Ham Stuff for Sale Cont'

Yaesu FT-901-DM All Mode, SSB, AM, FM Transceiver 160 through 10M, use as stand alone fixed, mobile operation or exciter for linear amplifier and

Yaesu SP-901-P Combination matching speaker with built in phone patch.

\$350.00

Dentron MLA-2500 Full 2KW Linear Amplifier all bands 160 through 10M. Factory installed 10M band came with original purchase just before FCC made it illegal to sell linear amplifiers in the US covering 10 meters.

\$450.00

Matching Dentron 3000A all band combination antenna matching network and SWR Bridge with Dual Large Face Meters, 160 through 10M. Rated for full 2KW SSB input.

\$140.00

This equipment is fully operational, cosmetically like new, no modifications and includes all manuals. I am the original owner and purchased this equipment new.

Rhon 50ft Tower with commercial tower climbing safety belt. Good condition.

\$50.00

Wilson 6 element triband beam (20, 15, 10M) in reasonably fair condition including a complete set of brand new element loading coils.

\$30.00

Cornell Dublier model H-IV-CD-45 Controller and Heavy Duty Rotor with brake. Reasonably fair condition.

\$30.00

If all equipment is purchased together I will sell for a reduced price.

Bruce Anderson W1VOT
112 Academy Ct.
Gahanna, OH 43230
Phone: 614-471-3899, Cell 614-208-6487
Email: Anderson.309@osu.edu