



STORY OF A SILVERTONE

Restoring Antique Radios
using the internet

Mark Hepburn

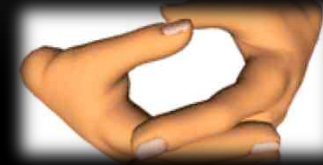
PARS November 2012





FINDING A NEW PROJECT

Bored and Needed a New Project



Found PARS Website and up-comming Auction Online

<http://pittsburghantiqueradios.org>



GETTING TO THE EVENT

- How do I get there from here ?
- Use Google Maps, Streetview and directions

Google 1495 Old Brodhead Rd. Monaca, Pa. 15061 Sign in

Get directions My places

A 1495 Old Brodhead Rd
Monaca, PA 15061

Directions Search nearby more

Street View

Route

2 mi
5 km

Map data ©2012 Google Edit in Google Map Maker Report a problem

<http://google.com/maps>



RESEARCHING A POTENTIAL BUY

- Wanted a phonograph
- Silvertone Model 110-146
- Go to eBay
- Enter model #
- Found one !
- Sold for \$20.00
- Non Functioning

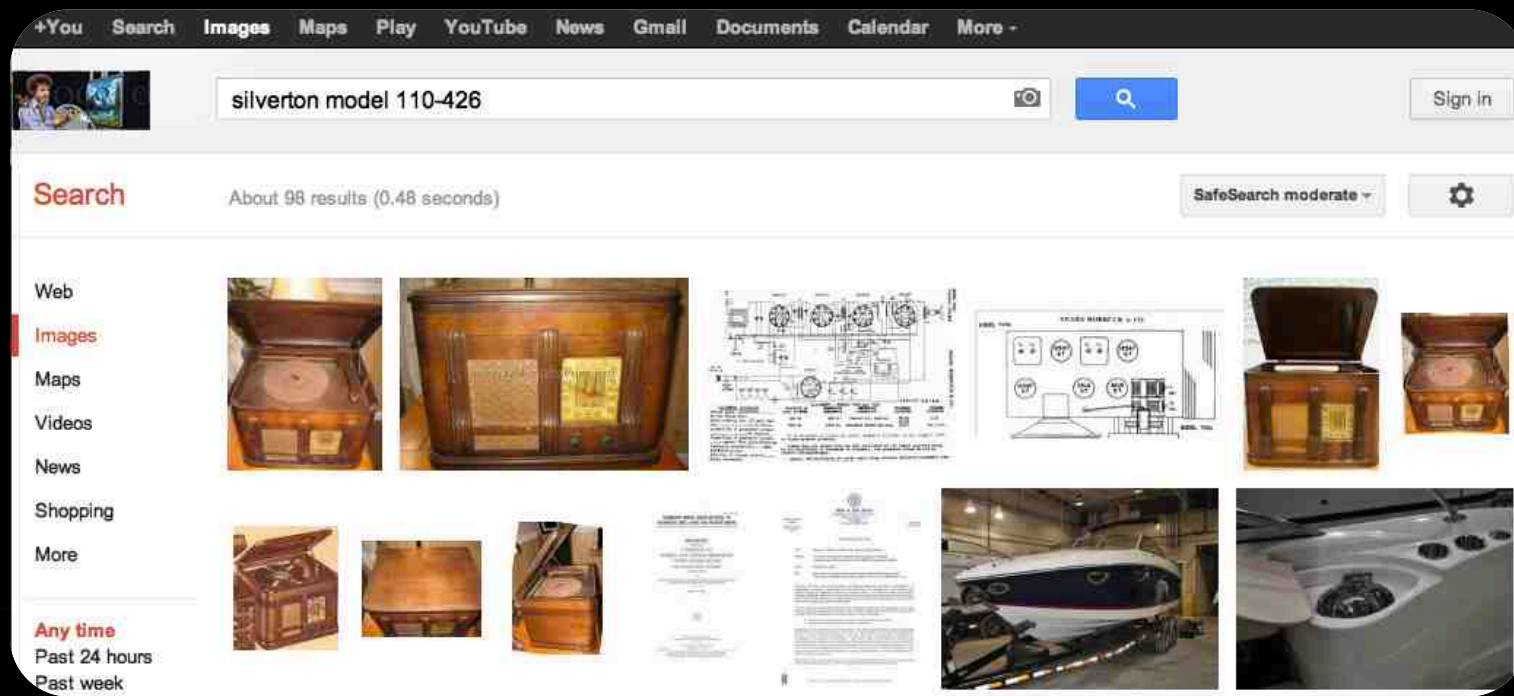
The screenshot shows an eBay search result for a vintage Silvertone radio and phonograph. The search bar contains the text "silvertone 110-426". The listing title is "VINTAGE SILVERTONE SUPERHETERODYNE RADIO & PHONOGRAPH COMBO # 110.426 WOODEN". The item is marked as "Used" and "SOLD". The winning bid is listed as "US \$20.45 [3 bids]". The seller is "a1auctionbarn (876)". The listing includes a photo of the wooden radio and phonograph, a "SOLD" banner, and various details such as the ending time (Feb 17, 2012 05:11:39 PST) and shipping information.

<http://www.ebay.com>



RESEARCHING A POTENTIAL BUY

- Search by Picture ! Use Google Images
- Good way to find an item if you cant read all the model numbers
- Clicking on a image will take you to the website with more info



<http://www.google.com/images>



RESEARCHING A POTENTIAL BUY

- Check out Antique Radio Museum
- Enter model number
- Lots of Technical information
- Lots of historical data

Sears, Roebuck & Co.: Silvertone Order= 57K 7054 Ch= 110.426 [Radio] ID = 1170473 784x564

For model Silvertone Order= 57K 7054 Ch= 110.426, Sears, Roebuck & Co.; Chicago (IL):
Ebay auction by user a1auctionbarn 130648996707

Country: [United States of America \(USA\)](#) Manufacturer/Brand: [Sears, Roebuck & Co.: Chicago \(IL\)](#)

Brand: Silvertone

Year: 1941/1942 * Type: Radio - or past WW2 tuner

Valves / Tubes 5: [12SA7GT](#) [12SK7GT](#) [12SQ7GT](#) [35L6GT](#) [35Z5GT](#)

Principle Super-Heterodyne (Super in general); IF-Freq 455 kHz

Wave bands Broadcast only (MW).

Details Record Player (perh.Changer)

Power type and voltage Alternating Current supply (AC) / 100-125 Volt

Loudspeaker Permanent Magnet Dynamic (PDyn) Loudspeaker (moving coil) / Ø 5 inch = 12.7 cm

Power out from Radiomuseum.org Model: [Silvertone Order= 57K 7054 Ch= 110.426](#) - Sears, Roebuck & Co.; Chicago

Material Wooden case

Shape Tablemodel, low profile (big size).

Dimensions (WHD) 15.75 x 11.25 x 13.75 inch / 400 x 286 x 349 mm

Price in first year of sale 21.95 \$

My Control Panel
User Name
Password
[GO](#)
[Lost Password](#)
[Register as new member](#)

Radiomuseum
[Collections / Suppliers](#)
[Countries / Brands](#)
[New Prices](#)
[New Pictures](#)
[New Tube Pics](#)
[Best Tube Pics](#)
[Schematic Finder](#)
[Create New Manufacturer](#)
[Create New Model](#)
LINKS

Casually interested?
[Click here](#)

To find real technical mu

Simple search for Antique Radios
Model OR -number without maker

Advanced search for Antique Radios
Model OR -number 110-426 Cyrillic
Model type: All Types
Country: All countries
Radio manufacturer: All manufacturers contains
 skip maker list if possible

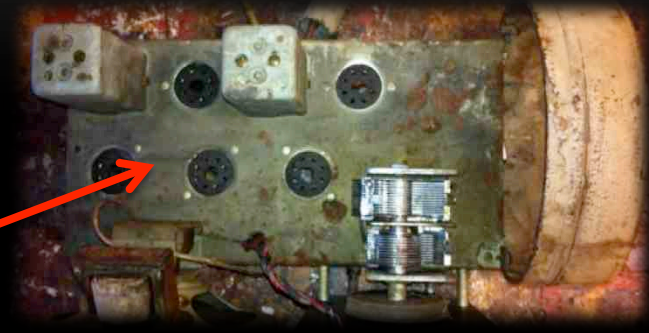
<http://www.radiomuseum.org/>



ASSESSING THE PURCHASE



Needs Recapped

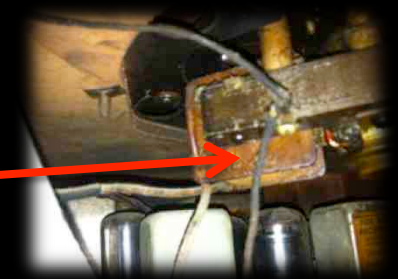


Minor Rust Removal



Make new Lenses

Minor Veneer Repair



Mechanical Restoration



Alignment

Take Lots of Photos --- I use my iPhone, then they automatically appear on my iPad

IDENTIFYING THE MODEL

- Can be Tricky
- May only have part of the Model
- Find Chassis Number
 - Same chassis in multiple models
 - Browse Nostalgia Airs Listings
- Find by Picture !
 - If you can guess as MFG
 - Browse RadioAttic
 - Over 10,000 radios cataloged

<http://www.radioatticarchives.com>



Click Mfg



Browse By Picture





GETTING SCHEMATICS

- Nostalgia Air
- Go to "Resources"
- Click your Manufacturer
- Locate your model or chassis number
- Click the "Disk" to save

NOSTALGIA AIR

Online Antique and Vintage Radio References
Free online schematics, manuals, tube data, references and more!

In loving memory of my father
He always believed in me and encouraged me in all things
He is sorely missed.

- RESOURCES**
Schematics & Manuals
- REFERENCES**
Articles and Information
- GARAGE SALE**
Items for sale
- WHAT'S NEW**
What's new in the last week
- SUPPORT NA**
How to keep NA online
- FORUMS**
Technical Discussions
- TUBES**
Tube Cross Reference
- LINKS**
Links to other sites
- SEARCH**
Search the site
- ABOUT NA**
Who we are

Don't Miss the Chat!
Day Nights at 10:00pm Eastern

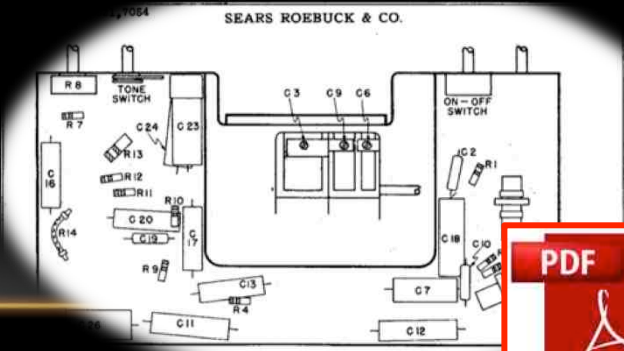
- Amper Co.
- Amper Radio Corp.
- Betchell Carlson, Inc.
- Shamrock Radio
- Shelley Radio Co.
- Sheridan Electronics Corp.
- Signal Electronics, Inc.
- Silver - Marshall, Inc.
- Silver (See McMurdo Silver, Inc.)
- Silver-Marshall, Inc.
- Silvertone
- Simmons Co.
- Simplex Radio Co.
- Sony Rover
- Standard Radio Corp.
- Standard Public Industries)

Sears Roebuck & Co.

| | |
|--------------------|----------|
| Model: 7054 | Chassis: |
| Power: | Circuit: |
| Tubes: | |
| Bands: | |

Resources:

- ... Volume 19 - CHANGES 19-7
- ... Volume 13 - SEARS 13-44
- ... Volume 13 - SEARS 13-72
- ... Volume 16 - SEARS 16-1
- ... SEARS 16-2
- ... 16-3



<http://www.nostalgiaair.org>

OTHER SCHEMATICS RESOURCES



- AntiqueRadioSchematics.org
 - High quality
 - \$\$ For Fee
- Free "BAMA" Boat Anchor Manual Archive
 - Old Test Equipment
 - HAM & other
- JustRadios.com
 - Ok Quality
 - \$\$

<http://AntiqueRadioSchematics.org>



<http://justradios.com>

The Boat Anchor Manual Archive Mirror: /

This is the BAMA archive. These manuals are available for download and free of charge.

NEW! For latest updates and news, [check out the news page](#)

I am now accepting new manuals for inclusion in this archive. Contact and submission information below

Google

Web bama.edebris.com

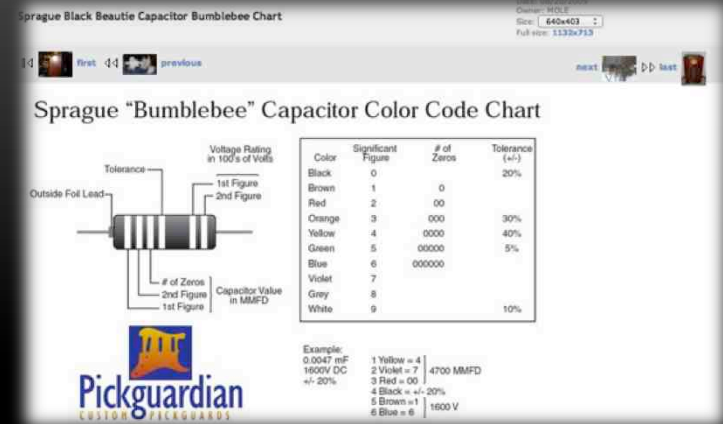
Directories:

- | | | | | |
|-----------|---------------|-----------------|----------------|-------------|
| W2IHY | dataprecision | hustler | optoelectronic | specific |
| accurate | datong | hygain | oskerblock | spectronics |
| adret | datron | icom | paco | spilisbury |
| advance | delco | illumitroniceng | palomar | sprague |
| advantest | delta | indinst | panasonic | squires |

<http://bama.edebris.com/manuals/>

RECAPPING

- Buy parts “JustRadios.com”
- Decoding Capacitor Codes
 - “Bumble Bees”
 - Old Ceramics – look like resistors



* <http://www.antiqueradios.com>

A MMF or MicroMicro Farad is the “Antique” name for a PicoFarad or “Puff”

- 1 pf = 1mmf
- PicoFarad or 1×10^{-12}
- Micro X Mico $1 \times 10^{-6} \times 1 \times 10^{-6}$

| uF / MFD | nF | pF / MMFD | | uF / MFD | nF | pF / MMFD |
|--------------|--------|------------------|--|-----------------|--------|---------------|
| 1uF / MFD | 1000nF | 1000000pF (MMFD) | | 0.001uF / MFD | 1nF | 1000pF (MMFD) |
| 0.82uF / MFD | 820nF | 820000pF (MMFD) | | 0.00082uF / MFD | 0.82nF | 820pF (MMFD) |
| 0.8uF / MFD | 800nF | 800000pF (MMFD) | | 0.0008uF / MFD | 0.8nF | 800pF (MMFD) |
| 0.7uF / MFD | 700nF | 700000pF (MMFD) | | 0.0007uF / MFD | 0.7nF | 700pF (MMFD) |
| 0.68uF / MFD | 680nF | 680000pF (MMFD) | | 0.00068uF / MFD | 0.68nF | 680pF (MMFD) |
| 0.6uF / MFD | 600nF | 600000pF (MMFD) | | 0.0006uF / MFD | 0.6nF | 600pF (MMFD) |
| 0.56uF / MFD | 560nF | 560000pF (MMFD) | | 0.00056uF / MFD | 0.56nF | 560pF (MMFD) |
| 0.5uF / MFD | 500nF | 500000pF (MMFD) | | 0.0005uF / MFD | 0.5nF | 500pF (MMFD) |
| 0.47uF / MFD | 470nF | 470000pF (MMFD) | | 0.00047uF / MFD | 0.47nF | 470pF (MMFD) |
| 0.4uF / MFD | 400nF | 400000pF (MMFD) | | 0.0004uF / MFD | 0.4nF | 400pF (MMFD) |

<http://www.justradios.com/uFnFpF.html>

FIX THAT CRUSTY POWER CORD



Great Sites for Replacement/Reproduction Parts

- RadioDaze
 - Wire, Power Cords
 - www.radiodaze.com
- TubesAndmore (Antique Electronic Supply)
 - Grill cloth, tubes, caps
 - www.tubesandmore.com

Priced by the yard. Due to the constraints of mechanical reproduction, colors are not completely accurate. Please note that because grill cloth/tolex needs to be cut, we cannot accept any returns on these items. Small grill cloth samples are available for evaluation at \$1.00 each. Save when you order a packet of grill cloth samples, part number S-GSG1.

S-G301 Grill Cloth, Oxblood/Tan 34" Wide

Due to the constraints of mechanical reproduction, colors are not completely accurate. Please note that because grill cloth/tolex needs to be cut, we cannot accept any returns on these items. Small grill cloth samples are available for evaluation at \$1.00 each. Save when you order a packet of grill cloth samples, part number S-GSG1.

S-G456 Grill Cloth, Basket Weave, Natural, 42" Wide

Natural Basket Weave, 42" wide, sold per yard. Due to the constraints of reproduction, colors are not completely accurate. Please note that because grill cloth/tolex needs to be cut, we cannot accept any returns on these items. Small grill cloth samples are available for evaluation at \$1.00 each. Save when you order a packet of grill cloth samples, part number S-GSG1.

Showing 9 of 9

Sort By: [Dropdown] View All

| | | |
|--|---|--|
| <p>W650-18ALL 8 CLS x 50' 18 Solid 600 Volt Base Price: \$149.00 USD</p> <p>Qty: <input type="text"/></p> <p>Add</p> | <p>W650-18BLK Black, 18AWG, Solid Cloth Wire, 600V Base Price: \$5.80 USD</p> | <p>W650-18BLU Blue, 18AWG, Solid Cloth Wire, 600V Base Price: \$5.80 USD</p> |
| <p>W650-18BRN Brown, 18AWG, Solid</p> | <p>W650-18GRN Green, 18AWG, Solid</p> | <p>W650-18ORG Orange, 18AWG, Solid</p> |

Showing 6 of 6

Sort By: [Dropdown] View All

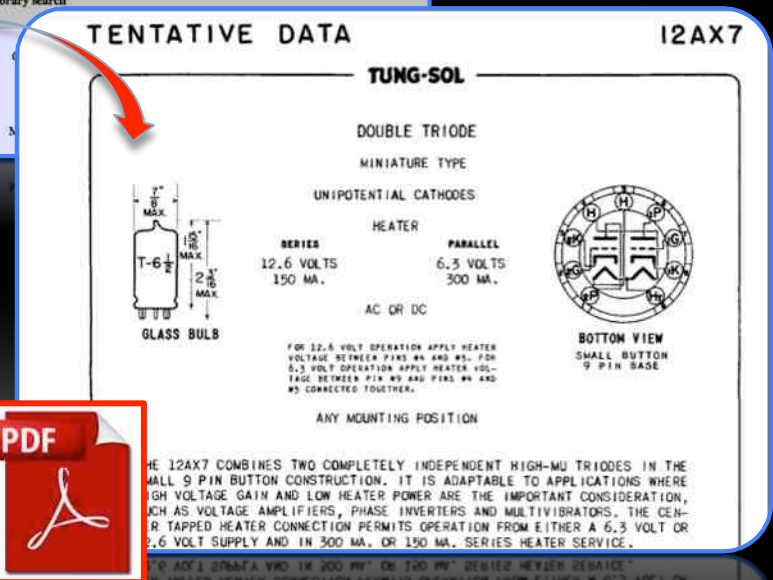
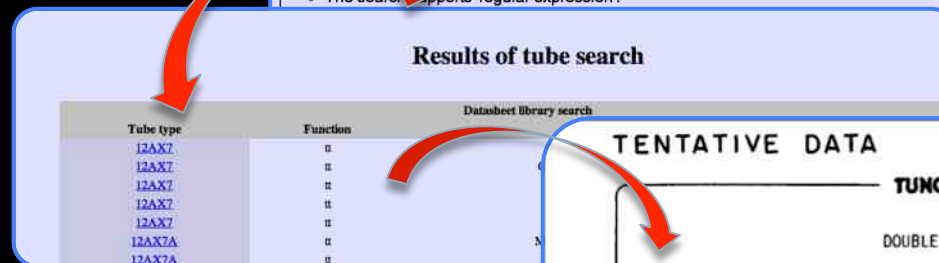
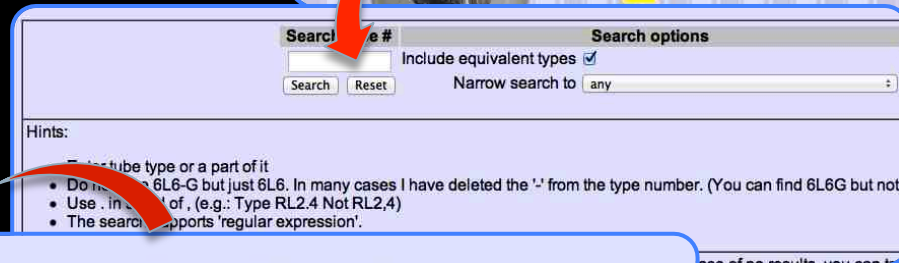
| | | |
|---|--|--|
| <p>PWC-1A Brown Braid Cloth Power Cord Base Price: \$6.00 USD</p> | <p>PWC-26 Yellow Braid Cloth Power Cord Base Price: \$6.00 USD</p> | <p>PWC-27 Charcoal Gry Braid Cloth Pwr Cord Base Price: \$6.00 USD</p> |
| <p>PWC-28 Red Braid Cloth Pwr Cord Base Price: \$6.00 USD</p> | <p>PWC-29 Black Braid Cloth Pwr Cord Base Price: \$6.00 USD</p> | <p>PWC-8 Gold Braid Cloth Power Cord</p> |

GETTING TUBE DATA

- You will need information on the Tubes
- Pinouts
- Voltages
- Datasheets

1. Navigate to page
2. Click "< Search"
3. Enter tube "12ax7"
4. Pick a datasheet

<http://www.tubedata.org>



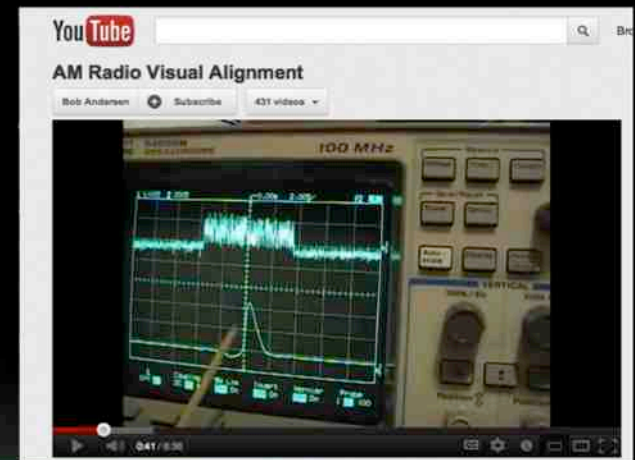
LEARNING TO DO AN ALIGNMENT

Sometimes seeing something makes it easier....

- Technique #1 – Simple and effective
 - Analog meter across speaker
 - Inject Signal
 - Peak IF cans for max output
- Technique #2 – Great if your worried about the response
 - Sweep the IF
 - Plot the Response with Scope
- Other Youtube channels
 - BandersenTV
 - Allamericanfive
 - batterymaker



Youtube Bandersentv Channel



* <http://www.youtube.com/watch?v=GWN21yPEIXE&feature=plcp>

** <http://www.youtube.com/watch?v=eDWqSAj-h1I&feature=plcp>

ITS ALL TOGETHER – TIME TO ENJOY

- Looks Good
- Radio Works Great
- No iPodDock! How do I get my iTunes ?



SOLUTION FIND AND ESTATE SALE

- Find an Estate Sale
- Can be a Place for old radios
- Hit or Miss



Bought some 78's !
For 50 cents

| |
|--|
| <p>Sydneys Estate Sales Saturday 7:30 am - 3:00 pm www.sydneystatesales.net email: sydneybmoore@msn.com (Cell) 412-969-7158 (Land) 412-835-3105</p> |
| <p>1. Sat. Oct. 27 - Upper St. Clair 1688 Hathaway Lane - 15241 McLaughlin Run - Morrow - L Red Mill - L Hathaway</p> |
| <p>2. Sat. Oct. 27 - Shaler Twp./Pittsburgh 507 Keystone St. - 15215 579/279 Etna 28N - bear L Rt. 8 N - R Kittaning St. - L Kittaning St. - R Sharps Hill - R Keystone</p> |
| <p>3. Sat. Oct. 27 - Pittsburgh/Sheridan 3875 Mayfair Street - 15204 51 N - bear L Carnegie/Airport - R Woodville Ave. - R Greentree Rd. - L Wabash - L Steuben - R Chartiers - L Chartiers</p> |

<http://www.sydneystatesales.net>

Welcome to
Jaye Wilkinson & Associates
 Estate and Household Sales



All Sales Run From 7:30 AM - 3:00 PM

All About Us Sat, Nov 10, 2012 1080 Lyndhurst PT BREEZE, PA 15206

Click below for more information:
[On Screen](#) [On Printer](#)

Our Service Northumberland, LEFT Beechwood, RIGHT Lyndhurst

Enter your address above and click here for custom driving directions

Upcoming Sales

Sun, Nov 11, 2012 O'HARA/FOX CHAPEL, PA 15238
356 Canterbury Dr.

<http://www.jayestatesales.com>

INTERESTING TIDBIT

- Stumbled on site that indexed all the RCA victor records
- Enter the number off the label and get all the information

Victor
Encyclopedic Discography
of Victor Recordings

home help register login

Browse Search Resources News About EDVR

Arhoolie FL 7031 (CD)

The following matrix(es) were issued with this catalog number:

Matrixes marked with indicate recordings are available for online listening.

| Matrix Number | Take Number | Date | Description |
|---------------------------|-------------|------------|--|
| BVE-57414 | 2 | 11/15/1929 | Oz w Bernie w magazynie / Wiejska Orkiestra Kmiecica |

Primary Performers:

| Name | Note |
|---|------|
| Wiejska Orkiestra Kmiecica (Musical group; Performer) | |

[Send the Editors a message about this record](#)

[Previous Record](#) [Next Record](#)

[Share](#) | [Facebook](#) | [Twitter](#) | [Google+](#) | [Print](#)

Victor Artists

[Clarice Vance \(soprano vocal\)](#)

On this Date...
October 29th, 1928

Shine on me (Matrix BVE-47241, take 1) was recorded by Holiness Singers; Ernest Phipps in Bristol, Tennessee

SITES FOCUSED ON CERTAIN BRANDS

Philco

Schematic, history, tips, parts

<http://www.philcoradio.com>

<http://www.philcorepairbench.com/>



Zenith,AK,Crosely,

Pictures, info, sale

<http://oldradiozone.com>



MANUFACTURER FOCUSED

Old Radio Parts
Lots of Rare parts

www.olderadioparts.com

(Was Play things of the past in Cleveland)

Antique Radios

Pictures, Forums, parts

<http://www.antiqueradios.com>

eHam.net

Forums, Great for Shortwave

<http://www.eham.net>



Play Things Of Past
Medina, Ohio
330-558-0247

Click to enlarge photo

Back Arrow to return

....RADIO PARTS - MAIN MENU.....

[More Photos](#) [Back to HOME page](#) [How to Order](#) [send e-mail](#)

[New additions.....](#) Items recently received but not put into categories.
[Tubers_tube.....](#) Tube Adapters for mainly 1920's type vacuum radio tube



Antique Radios
The Collector's Resource

Since 1991...
The Collector's Resource

In 1995 a small niche site was inaugurated on the then new World Wide Web. Over the past several years, with the help of hundreds of...

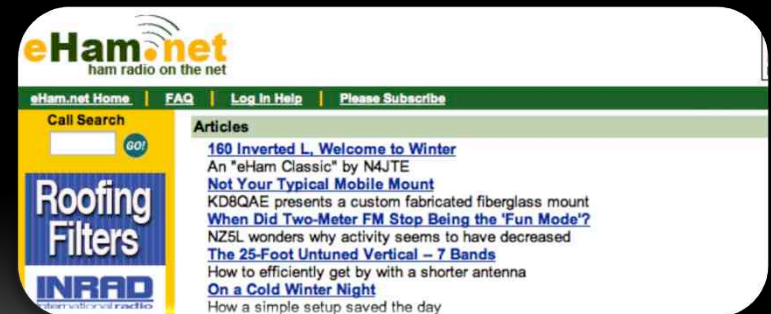
The best place to get your questions answered in an ad- and spam-free...

Hundreds of radio and radio related sites categorized and described for quick...

Writings about antique radio and collecting. Many historical articles are...

View photos from site visitors, and share photos of some of your own radios.

Is it yes or no? Should you buy that radio? Will you ever get that elusive...



eHam.net
ham radio on the net

[eHam.net Home](#) | [FAQ](#) | [Log In Help](#) | [Please Subscribe](#)

Call Search

Roofing Filters

INRAD

Articles

[160 Inverted L, Welcome to Winter](#)
An "eHam Classic" by N4JTE

[Not Your Typical Mobile Mount](#)
KD8QAE presents a custom fabricated fiberglass mount

[When Did Two-Meter FM Stop Being the 'Fun Mode'?](#)
NZ5L wonders why activity seems to have decreased

[The 25-Foot Untuned Vertical - 7 Bands](#)
How to efficiently get by with a shorter antenna

[On a Cold Winter Night](#)
How a simple setup saved the day



DEVICES FOR ACCESSING THE INTERNET



Laptop

- Will do EVERYTHING
- Takes effort to maintain & install software
- Care against virus, malware
- \$500-\$1000



Tablet

- Will do 99% of whats needed in this PPT
- Very easy to maintain – everything in this PPT is builtin
- Unlikely to get virus/malware
- Easy to use minimal computer expertise
- Tool on my Electronics Bench
- \$300-\$500



Smart Phone

- Will do 80% of whats needed in this presentation
- Very Easy to maintain
- Unlikely to get virus/malware
- Small, hard to see – great for “field work”
- \$0- \$300

LIST OF SITES

- pittsburghantiqueradios.org
- google.com/maps
- www.ebay.com
- www.google.com/images
- www.radioatticarchives.com
- www.radiomuseum.org/
- www.nostalgiaair.org
- AntiqueRadioSchematics.org
- bama.edebris.com/manuals/
- justradios.com
- www.antiqueradios.com
- radiodaze.com
- tubesandmore.com
- tubedata.org
- www.youtube.com
- www.philcoradio.com
- www.philcorepairbench.com/
- oldradiozone.com
- www.antiqueradios.com
- www.eham.net
- victor.library.ucsb.edu

THANKS !

Questions feel free to email

markh8366@yahoo.com