

# The Colorado Radio Collectors Antique Radio Club

# FLASH!

Volume 12

March



April

2001

Issue 1



*In this issue...*

- ◆ CRC Annual Show/Sale Info ◆ Spark Wireless - History & Technology ◆
- ◆ Philco 70 Repair Tips ◆ Confessions of a Transistor Collector ◆

## ABOUT THE COVER

You can imagine how much enjoyment this young man must have been getting out of his ability to communicate by spark wireless transmission - back there in the good 'ole days. It was probably also a good thing that his neighbors didn't have television yet. Turn to page 7 and read Mark's article on this original wireless technology.

## The Colorado Radio Collectors Antique Radio Club

**Meetings:** Unless otherwise noted in this journal, regular meetings are held on the second Sunday of every other month starting with January (except: 3rd Sunday of May) at 1:00PM at the Museum of the Americas Bldg, 863 Sante Fe. (between 8th & 9th Ave's). The meeting normally includes business items, discussions, "show and tell", a raffle and a swap meet.

**Membership:** All dues are \$12.00 annually. Joining dues are prorated to June 1st. Contact club for foreign rates. Send dues and membership inquiries to the CRC Treasurer, Robert Baumann, 1985 S. Cape Way, Lakewood CO 80227, (303)988-2089, RGBdenver@aol.com

**Article Contributions:** Submission of articles are always appreciated. This would include historical and technical items as well as stories about individual collections. Articles may be written or e-mailed, and need not be in final form. Submissions and requests for information should be directed to the CRC "Flash!" Publisher, Larry Weide, 5270 E. Nassau Cir., Englewood CO 80110, (303)758-8382  
lweide@attglobal.net.

### C.R.C. 2000-2001 Officers

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**Archives &** Charles Brett  
**Book Sales** Colorado Spgs (719)  
495-8660

**Want Ads:** Submission of Sell/Want ads are always free to CRC members. Non-members may advertise in the Flash! for \$0.20 a word. Display advertising is available by contacting the CRC publisher, Larry Weide, for info and rates.

**Publishing Deadlines:** All submissions must be submitted by the 1st of Feb, Apr, Jun, Aug, Oct and Dec. for publishing in the following months.

**Thanks** to the **Pressworks** for printing the Flash! - (303) 934-8600

### Upcoming 2001 CRC Events

CRC Annual Show/Sale April 21-22, Regular Meeting May 20th



# *Colorado Radio Collectors Antique Radio Club*

Founded October 1988

Dedicated to the Preservation and Education of  
Wireless, Radio, Television and Associated Equipment.

Volume 12, Issue 2

March/April 2001

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Note: The following are CRC email address corrections

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# **Spring is Busting Out All Over**

by Tom Kelley, CRC President

**Hello again fellow club members,**

**By the time you read this column our annual show will have come and gone. No doubt, it was a great success. Look for the contest results in the next issue of the Flash.**

**Summer will be coming along soon, and hopefully some of you will be able to get to one or more of the “big” shows around the nation. As some of you might know, the Muchow collection (one of the world’s premier collections) will be auctioned off during the week of the Elgin radio event - in Elgin.**

**Mark your calendar for the May CRC meeting. Remember that, due to Mother’s Day, our meeting is on the *3rd* Sunday of the month - the 20th. This meeting is special and important, in that we will be electing 2001/2002 CRC club officers. You’ll have a chance to contribute to the club as President, Vice President, Treasurer and Archivist. Don’t forget this includes managing our cross subscription to the ARC.**

**So, I hope to see as many of you as possible at our May meeting. Don’t forget to bring something interesting for our “show ’N tell” and raffle.**

**Tom**



# The Annual CRC April Antique Radio Show and Sale

## Everything you need to know

The specialty category for this year is “**Art Deco**”. All types of artifacts are acceptable.

### What, Where, When:

**Location:** The Denver Stock Show Complex - North Building

**Date:** Contest April 21, showing and sale April 21 - 22

Friday, April 20th - 1:00pm to 8:00pm - Setup

- ✓ This is the only time that you can drive into the complex to drop off equipment. Enter at N/E gate, then around to west entry ramp.
- ✓ You can setup Saturday, but you will have to carry equipment in.

Saturday, April 21th - Set up, Registration, Contest and awards

- ✓ 8:00 am - Setup and Registration
- ✓ 9:00 am - Complex opens to public, begin selling
- ✓ 10:00 am - Registration Cutoff
- ✓ 10:30 am - Judges Briefing
- ✓ 11:00 am - Judging Commences
- ✓ 1:00 pm - Awards Posted
- ✓ 5:00 pm - Complex closes for the evening
- ✓ 6:00 pm - CRC dinner commences

Sunday, April 22th - Display and sale continues

- ✓ 10:00 am - Complex opens to public
- ✓ 4:00 pm - Complex closes

### Costs for Space and Table Rental:

The stock show complex charges the CRC for the spaces assigned and for each table and chair that is used. The CRC pays for the show space and tables but passes on the cost of those items that are used by the sellers.

**The cost this year is \$20 for a space and table combination.** Sellers may share this cost with each other in any combination.

Accessories	Metal Case
Bakelite	Novelty - Transistor
Battery - 1926-1929	Novelty - Tube
Catalin	Plastic - Tube
Catherdral	Portable - Pre 1939
Classic Audio	Portable - Post 1938
Communication Gear	Pre 1925
Cosole - Full Length	Speakers
Console - High/Low Boy	Specialty - “Art Deco”
Crystal Set	Television
Metal Box - 1920’s	Tombstone
People’s Choice *	Transistor
Best Restoration **	Tube/Parts Display
Best of Show **	Wooden
* = Popular vote by public    ** = Popular vote by CRC members	

### **Judging Criteria:**

- Internal Condition
- External Condition
- Rareness - Meaning relatively few are in existence
- Uniqueness - Meaning novel, and not many like it
- Presentation - Meaning how well displayed, documented, etc.

As in past years there is an emphasis, by criteria weighting, on an entry's condition. This allows radios of all ages and collector value to compete fairly. Thus, collectors who have given time and care to restoration and/or cleaning to *any* of their radios should not hesitate to consider entering them into the contest. The show is only successful when there is abundant participation by CRC members.

### **Pre Contest Judges Briefing:**

- ☒ Explanation/Review of categories and criteria
- ☒ Judging assignments based on membership attendance and judge's own entries
- ☒ Pairing of judges
- ☒ Explanation of entry reviewing and arriving at a judging consensus

### **CRC Dinner Arrangements:**

We will continue to have the annual show dinner at the end of the first day of the show. This is a time when we can get together to relax, enjoy a leisurely meal, talk about the events of the day and have the official announcement of rewards. *You need not attend this dinner to receive your award(s).*

- Reservations must be made by 12:00AM on Saturday with the dinner coordinator. Decision on fixed price or general menu selection pricing will be known on show morning.
- If fixed price, payment for dinner must accompany reservations.
- Since we have to guarantee fixed price arrangements to the restaurant, there will be no refunds.

### **Additional Items of Interest:**

- As in the past shows, sellers may include any items that fall into the category of “collectable” - they need not be radio related.
- Volunteers are needed to watch over displays - Sat. & Sun. Please consider coming and staying for at least a while even if you're not entered in the contest or selling.
- You are highly encouraged to wear your CRC membership badge. You will need your badge for free exhibitor entry into the building. You will need your badge to receive complimentary CRC snacks.

### **A Timely Reminder - please read**

***The CRC does not assume any liability for lost, stolen or damaged articles, brought to this event by anyone, for show or for sale. The Denver Collector's Fair does provide a show-time walking guard and off hours security.***

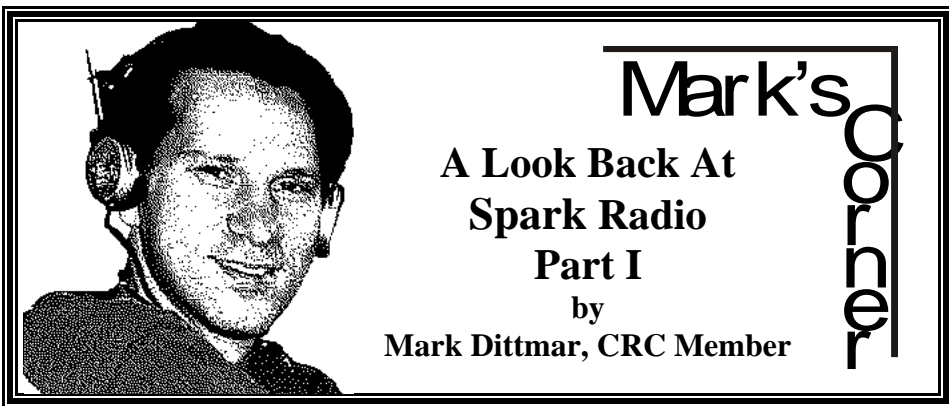


Rows and rows of radios! Just a sample of what you can expect to find at the CRC radio show and contest.



You too could be selling your radios to one of Denver's largest collector crowds - just like these guys!





In the early teens and even up to the early 1920s, the cheapest, simplest and quickest way for the neophyte amateur radio operator to get a signal on the air was to use the “spark coil” transmitter; with an inexpensive and commercially purchased spark coil and a few other simply constructed components, an amateur could “talk” with his buddies down the block or even a few miles away. This type of transmitter was also widely used among amateurs in rural areas, where a lack of commercially generated AC power required the use of battery powered transmitting sets.

Recently, I was able to add one of these early spark coils to my collection of radio stuff. A picture of a typical “wireless” spark coil is shown in figure 1, which is taken from an early Haller Cunningham (Halgun) Electric Company advertisement. My coil is similar in appearance to this one, except the secondary terminals are on the top of the coil box rather than at the sides. The box itself is 7 7/8” long and its height is 4 1/2”. It has a core 5/8” in diameter consisting of a bundle of iron wires. It has a primary resistance of 1.5 ohms, and a secondary resistance of 9800 ohms. The number “2” is stamped into the wood base. Connecting a source of 6 to 12 VDC to the primary terminal of my coil will generate a healthy 1/2” spark between two pieces of hookup wire. Based on these physical characteristics and photographs of similar coils contained in early wireless catalogs, I suspect that the



**Fig. 1**

manufacturer of the coil was the Electro Importing Company. It is probably early 1920s vintage. Acquiring this coil led me into a path of research into the area of spark coil transmitter design and use. I had a bunch of questions that I wanted to answer. What kinds of “hookups” or designs for spark coil transmitters were prevalent in the early amateur community? Just how well did they work? What kinds of signal bandwidths were *really* possible with this kind of transmitter? What distances were achievable with this technology? What were they like to operate and adjust? What did they *sound* like on the simple receivers of the period? Most of these questions can be answered by a careful study of the early available literature. A couple, however, I could only obtain by constructing my own spark coil transmitter based on typical designs of the era and taking the measurements myself (NOTE: my spark coil transmitter was never connected to a real antenna and ground for these experiments. This type of transmitter has been illegal to use on the air for a long time). In this article, I will discuss some of the background related to the spark coil set and the historical context in which it was used as well as how the spark coil itself works. The next article will review the basic components and the hookups of various spark coil transmitter

designs, and ultimately I will discuss the really fun stuff - construction details of my replica transmitter, the various measurements I was able to take (with a “dummy” load antenna), and a full description of how the transmitter is adjusted in practice. I’ll even have a recording I made of how the signal sounds in a two-circuit tuner crystal set which will be available on my web site. I’ll also try to fit in some of the more interesting distance claims made by some of the early amateurs with brief descriptions of their particular spark coil setups.

### **Spark Coil Transmitters and Amateur Radio**

Historically, the spark coil transmitter has had a bad reputation. In the early days of amateur radio, transmitters based on the spark coil were very popular among beginning amateurs as well as with people who just liked to fiddle with electric stuff. Along with the popularity of the spark coil came a lot of criticism and complaints from the early amateur radio community (via members of the ARRL, the American Radio Relay League), which early on viewed the “little boy with the

spark coil” as a source of interference to their message traffic relay efforts. It is important to remember that during the reign of the spark transmitter (pre-1921), the transmitted signals were very “broad” by today’s standards - a typical spark signal might occupy 50 khz of bandwidth or usually more even with the best equipment and technology available to the amateur at that time. To put that in some kind of perspective, the entire modern AM BCB today occupies 1170 khz. An additional legal constraint after 1912 was the requirement that amateur operators operate their stations at frequencies below 200 meters (above 1500 khz). It was widely believed at the time that the lower the frequency, the better the range of the transmitted signal, so long distance relay work among amateur operators tended to cluster around the 200 meter frequency. With the broad signals and restricted range of operating frequencies, interference was always a significant problem. Probably because the spark coil transmitter was often the first transmitter for a beginner, it was frequently handled with little or no technical knowledge, and acquired an unsavory reputation as an interference source. Improperly used, the spark coil was capable of generating true broadband interference, with bandwidths of

many *hundreds* of kilohertz. Naturally, this raised the ire of the serious relay operator.

However, later editorials appearing in the ARRL’s official magazine QST, spurred by letters of protest from serious spark coil operators, took a more conciliatory tone towards the operator of the “squeak box sets.” In a September 1919 editorial in QST, the editor admits that “A properly designed spark coil set is capable of remarkably good work, and not only does it make an excellent short-range set for a star station, but there surely exists a definite place for these spark-coil stations in the ARRL....” The same editorial asks for article contributions from the readership, which would describe a “really good and law-abiding spark-coil set...”.

### The Spark Coil

Elmer Bucher, instructing engineer for the Marconi Wireless Telegraph Company of America, describes the fundamental operation of the spark (induction) coil succinctly in his 1917 book, Practical Wireless Telegraphy:

Figure 2 is a diagrammatic sketch of an induction coil. P is the

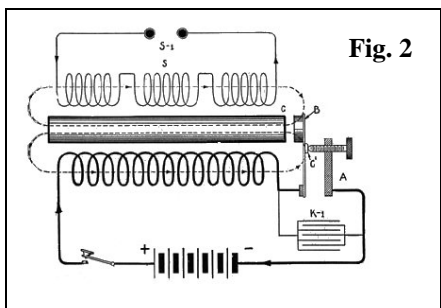


Fig. 2

primary winding and S the secondary winding. B is a piece of spring brass fitted with a soft iron button that may be attracted to the core C. A is an adjustable thumb screw, platinum tipped, which makes contact at C1, closing the circuit of the battery through winding P. In practice solenoid S is wound about C. When the battery circuit is closed at K, the core becomes saturated with magnetism and attracts the armature B. B being drawn to the end of the iron core, the flow of current is broken at C1. Since the current is now cut off from P the magnetic field disappears and the tension of the spring causes the circuit to be closed again at C1. This process is repeated continuously, resulting in from 30 to 100 breaks per second. The coil P generally has 1 or 2 layers of coarse insulated copper wire of different sizes (the size varying with the current) which are thoroughly insulated from the core C. Winding P is covered with an insulating tube which supports winding S. The secondary winding may have many thousands of turns

of very fine wire which are wound in the form of pancakes and connected in series. Thus the electromotive force at the terminals of winding may be as great as 150,000 volts when the pressure of the current through P is 20 to 30 volts.”

Although Elmer does not mention it, K1 in his diagram is a capacitor, which is placed across the contacts of the magnetic interrupter (the spring brass and contact assembly) to prevent sparking at these points. Generally, this capacitor is hidden in the base, and has a value of a few microfarads. The one in my coil appears to be constructed of paper and aluminum foil, rolled up into a rectangular shape. This capacitor is potted into the wood base, so only the top of it is visible.

Spark coils available to the amateur were rated by “spark length between needle points in air” for a given nominal primary voltage. An early William B. Duck Catalog shows coils available from ¼” spark length up to 6” spark length. Primary voltages ranged from approximately 4 1/2 VDC for the ¼” coil up to 30 VDC for the 6” coil.

In the next issue of the FLASH, I will review the fundamental circuits and components of the spark coil transmitter

# An obituary of note

by Robert Baumann, CRC Member

Author Alice Clink Schumacher of Great Falls, Montana passed away December 20, 2000 at age 91. I suspect most CRC members might not know who Alice was. She authored the biography Hiram Percy Maxim, Father of Amateur Radio. In an effort to support her son's growing interest in amateur radio, she researched HPM (who was also an author, car builder and inventor: coming from a family of inventors) from 1961 to 1969 when she wrote the biography that was first published in 1970.

In 1996 (after this first edition had been out of print for over 20 years) the editor of Electric Radio magazine began working with Alice on publishing a second edition focusing in more depth on HPM's contribution to amateur radio. An article on Alice appeared in the September 1998 issue of Electric Radio when the availability of the second edition was announced. (I have not yet read the expanded book and encourage any CRC member who has to submit their review to The Flash.) I found a 1970 first edition for \$1 a short time later. I quickly read the small, 153 page book and upon completion wrote the author to express my enjoyment. On February 22 of last year, she graciously signed and inscribed the book for me. Now less than a year later, she is gone.

The second edition is available through the Electric Radio Store. It includes 92 additional pages that Alice wrote me "were gleaned from 23 years of QST's, micro film strips and letters. Thanks to the ARRL..."

I would suggest members interested in this and related books on hollow state amateur (or) radio (in general) request a sample of ER (970-564-9185 or er@frontier.net). Items for sale follow the classifieds at the back of each issue.

# The First CRC meeting of the millennium



**Tom Kelley glows  
over a Zenith L509**



**Tom Pouliot and his  
Kennedy 110/325**



**Chuck Brett shows us  
some of his Apollo  
space program radio  
designs**

**at our new meeting place!**



**A member with  
a Cutting and  
Washington  
receiver**



**Just some of the CRC attendees**

# The Philco 70, 70A

## Official Repair Tips

[  
We thank Bill Overbeck, the editor of the Delaware Valley Historic Radio Club's very fine journal the "Oscillator", for permission to re-print this article from their Jan/2001 issue. This information was originally printed in 1939 Philco model 70 service information.]

### **Inoperative, Type '27 tube lights up brightly**

- 1) Second IF transformer secondary winding short-circuited to primary winding. Disassemble and move leads.

### **Inoperative (rectifier plates red hot)**

- 1) If filter condensers check O.K., inspect filament leads of tubes at rear of chassis at points where leads pass under primary trimmer condensers of IF transformers. Leads sometimes come in contact with edges of condenser plates, the latter in time cuts through the insulation on wire, "shorting" entire "B" supply.

### **Inoperative**

- 1) Examine pigtailed on various resistors, making sure they are not "shorted" to other parts (particularly the condenser lugs).
- 2) Check connection between the cathode of the oscillator and the coil to which it connects. Resolder all joints in oscillator circuit.
- 3) "Shorted" oscillator section in tuning condenser.
- 4) "Open" speaker field coil (sometimes indicated by "frying" noise).
- 5) "Open" Output transformer primary.
- 6) "Shorted" condensers No. 21, 28 and No. 5

### **Inoperative (tuning friction drive inoperative)**

- 1) Worn front variable condenser bearings, permitting station recorder to drop and making friction drive inoperative. Take out rotor assembly and tin well with solder. Then run "babbitt" bearing metal (out of an old auto bearing) around shaft, and let it cool. Cut down to proper size with a rat-tail file.

### **Intermittent reception**

- 1) Tighten any loose screws on side of tuning condenser.
- 2) Check audio coupling condenser.
- 3) Check oscillator cathode by-pass condenser. This is a double unit - replace with 0.1 mfd units.
- 4) If elements in 47 tube overheat, replace tube.



**Intermittent reception (volume drops to about 1/2 of its original level - at any setting of volume control)**

- 1) Replace audio coupling condenser between the plate of the 2nd detector tube and the grid of the 47 output tube faulty 0.015 mfd by-pass condenser at the AC line. Replace. Fading on "locals,"

**Intermittent reception**

- 1) Open circuiting RF f by-pass and audio coupling condensers, usually at the eyelet of the case. Replace with new style condensers having stranded wires at eyelet's. Note: the above condition is usually difficult to test but can usually be induced by shorting across the blocking condensers several times in succession, causing the condenser to open; a 0.01 mfd condenser bridged across it should bring the set back to full volume.
- 2) Defective type '47 tube. Replace.

**Weak reception all over the dial; IF transformers will not peak (serial no. below 22,000)**

- 1) Open-circuited auxiliary fixed condenser across the IF padding condenser terminals.
- 2) Open-circuited high-frequency feedback condenser. Replace with new unit.
- 3) Defective RF choke.

**Low volume at the low frequency end of the dial; distortion Low-freq. "padder" cannot be peaked**

- 1) Defective type '24 second detector tube (even though it may test O.K.). replace by substitution with new tube.
- 2) Open-circuited auxiliary low-frequency padding condenser.

**Weak reception at high-frequencies**

- 1) Open-circuited low-frequency condenser across the low-frequency padder and the oscillator cathode bias resistor. Replace with a new condenser.

**Impossible to align circuit at 1400 kc**

- 1) Look for "open" 0.00011 mfd. Condenser between oscillator coil and plate of oscillator tube. Replace with a 0.0005 mfd Unit. Receiver will now align and be more selective than originally.

**Suppressor grid of the type '47 tube turns red-hot**

- 1) Section of voltage divider between the high voltage center tap of the power transformer and ground short-circuits when it becomes hot. Replace with a 240 - 300 ohm, 10-watt unit.

### **Loud howl, Microphonics, Erratic tone control operation**

- 1) Change in capacity or open-circuit in 0.00025 mfd. Condenser connected to the plate lead of the second detector tube next to the choke coil. Replace with a new unit.
- 2) Vibrating tuning condenser plates. Place a pair of rubber washers under the chassis so as to "float" it.
- 3) Reverse the coil leads.
- 4) Try readjusting the padding condensers
- 5) In receivers bearing serial number below 22,000 check for "open" detector plate by-pass condenser on B plus side of RF choke.

### **Distortion (signal fades out completely)**

- 1) Replace 0.25 meg. Resistor in grid circuit of 47 tube.

### **Distortion**

- 1) Check speaker cone to see if it has stiffened. Replace.
- 2) Check the speaker. It is mounted with the output transformer on top, so that the sealing compound can run out and down around the voice coil. This compound has a low melting point and starts to run when the transformer is only warm. The remedy is to invert the speaker.
- 3) If output quavers, check the volume control and the continuity of the oscillator coil.

### **Distortion at low volume**

- 1) Check 2nd det. Tube by substitution.

### **Distortion at high volume, weak tinny signal**

- 1) Breakdown of insulation on primary of output transformer (indicated by "frying" noise)
- 2) "Shorted" condenser No. 33.

### **Whistling or squealing**

- 1) If usual methods to cure oscillation fail, by-pass the filaments of the RF and IF tubes with capacities ranging between 0.005 and 0.25 mfd. Find best value by experiment.
- 2) "Open" section in condenser No. 5.
- 3) "Open" condenser No. 12, 21, 23, or 28 - see note (A) listed under "Philco receiver General Servicing Data" at beginning of Philco case histories.

### **Whistling (not traceable to missing rubber cushions or floating condenser gang)**

- 1) Caused by vibration of oscillator coil. Repair by dropping wad of paper in coil and with chassis upside down, drop beeswax from hot soldering iron point onto the paper. This will steady the coil.

### **Intermittent noise**

- 1) Defective type '47 tube bias section on voltage divider resistor. Replace with 180-ohm 10 watt unit.

### **Noisy reception**

- 1) Check grid connections on all tubes.
- 2) Check condition of volume control.
- 3) Peeling plates on tuning condensers.
- 4) Faulty output transformer primary.
- 5) Loose shield over oscillator and RF transformers.

### **Hum (on stations near center of band)**

- 1) Look for trouble in the by-pass condensers across the AC line input circuit.

### **Hum (low-pitched)**

- 1) Faulty 0.25 mfd. Condenser in plate circuit of 24A 2nd detector. This condenser connects between the chassis and the junction of the 0.24 megohm and 45,000 ohm resistors used in series with the plate of the 2nd detector tube and the high-voltage lead.
- 2) Faulty condenser No. 40.

### **Microphonics**

- 1) Replace oscillator transformer No. .8

### **260 kc airport beacons cause interference**

- 1) Readjust the IF compensating condensers and the oscillator compensating condenser to either 250 or 270 kc.

### **Obtaining smoother volume control**

- 1) Replace dual volume control with a single, tapered unit, which will give smoother volume control.

### **Slipping dial-drive shaft**

- 1) Pull the shaft down tight and solder thin washer to the bracket.

### **Microphonic Howl**

- 1) If this condition occurs when the tone control is turned all the way to the left, check the 0.00025 mfd. Phone condenser connected to the plate of the second detector. This condenser (which has a yellow dot on one side) causes the trouble because of changes in its value or because it becomes open.

# Collector Books for Sale

CRC Members get specially reduced prices on popular collector books. Place and receive your order at club meetings. If ordered for mail shipment add \$1.75 postage for each book ordered. For information and ordering: Charles Brett, (719) 495-8660, brett3729@aol.com. *This listing has item and price updates - void all other listings.*

Retail Club

<b>RADIOS, (GENUINE PLASTIC) OF THE MID CENTURY</b> Jupp & Pina, hard bound, 219 pgs, 1998 PG, 450+ color pics	\$39.95	\$28.00
<b>ANTIQUÉ RADIOS, COLLECTOR'S GUIDE - 4th EDITION</b> Bunis, 1997 values, revised & updated, new photos, 248 pgs	\$18.95	\$15.00
<b>GUIDE TO OLD RADIOS, POINTERS... - 2nd EDITION</b> Johnson, 277 pgs, 1995-96 prices	\$19.95	\$15.00
<b>ANTIQUÉ RADIO RESTORATION GUIDE - 2rd EDITION</b> Johnson, 144 pgs, repairing, refinishing, cleaning	\$14.95	\$12.00
<b>RADIO, EVOLUTION OF THE - VOLUME ONE</b> 227 pgs, 118 in color, More than 800 radios pictured and priced for 1992, pictures from the collections of CRC members Jim Berg and Johnny Johnson	\$22.95	\$18.00
<b>RADIO, EVOLUTION OF THE - VOLUME TWO</b> All different from Volume One, 226 pgs, Color, Radios of the 1920s to 1960s, with 93-94 values, pixs from CRC member Jim Berg	\$24.95	\$19.00
<b>TRANSISTOR RADIOS, COLLECTOR'S GUIDE VOL II</b> Bunis, 1996 prices, Full Color	\$16.95	\$13.00
<b>ZENITH TRANSISTOR RADIOS, 1955-1965</b> Smith, 1998 PG, 160 pgs, 226 color pics, info, descr.	\$29.95	\$22.00
<b>THE ZENITH TRANS-OCEANIC (THE ROYALTY OF RADIOS)</b> Bryant and Cones, 160 pgs, 1995	\$29.95	\$22.00
<b>ZENITH RADIOS THE EARLY YEARS 1919-1936, Cones</b> 1997-98 Price Guide, 223 pgs, 100's Photos, Desc., Hist.	\$29.95	\$22.00
<b>RADIOS BY HALLICRAFTERS, revised 2nd edition</b> Dachis, 1999 values, 220 pgs, 1000+ pics, id's, history	\$29.95	\$22.00
<b>CLASSIC TV'S, PRE-WAR THRU 1950'S</b> 86 pgs, color & b/w pics, descriptions, etc.	\$18.95	\$15.00
<b>Machine Age to Jet Age, Radiomania's Table Radio Guide 'III, 33-'62</b> Stein, 256 pgs, 100's of b/w photos	\$29.95	\$24.50
<b>TRANSISTOR RADIOS, 1954 TO 1969</b> Norman Smith, with prices, 160 pgs, 1000 photos, 1998	\$29.95	\$22.00
<b>PHILCO RADIO: 1928 - 1942</b> Ramires & Prosisé, 160 pgs, 828 pics & drawings, 1993	\$29.95	\$22.00
<b>RADIO AND TV PREMIUMS</b> Jim Harmon, 256 pgs, 200+ photos, 1997	\$24.95	\$19.00

<b>RADIO MANUFACTURES OF THE 1920'S VOL I</b> Alan Douglas, 225 pgs, 1988	<b>\$24.95</b>	<b>\$19.00</b>
<b>RADIO MANUFACTURES OF THE 1920'S VOL II</b> Alan Douglas, 266 pgs, 1989	<b>\$29.95</b>	<b>\$22.00</b>
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# Confessions of a Closet Transistor Radio Collector

by Wayne Gilbert, CRC Member

Alright, I know. Admitting to collecting transistor radios is just one cut above admitting to collecting G.E. clock radios. But I've got to confront reality and come out of the closet and face all you real-radio collectors. I've got to be me.

I haven't been hooked on transistor radios long, not even long enough to know anything more than the rudimentary basics of the addiction, and it is an addiction no less powerful than collecting real-radios is to many of you. In fact, last year this time I was clean - not a collectable transistor radio in the house.

Then came a club meeting where one of our members (we will just call him Neil) was pressed into giving a last minute spiel on his collection - the scheduled speaker didn't show, or something. How fickle fate was that day, casting Neil into the spotlight and out of the role as a little understood collector of transistor radios and, although very knowledgeable about them, probably the only serious transistor radio collector in the club.

I don't know what it was he said, but I left the meeting very confused and bothered with conflicting thoughts. Why would a devout real-radio collector like me ever even consider collecting transistor radios? But there must be something worthwhile in collecting them, because I had to admit Neil is smart, well educated, and, although somewhat eccentric in his collecting tastes, an otherwise very likeable and nice fellow. Actually, he has all the qualifications to be the next president of our radio club.

The first thing I did was to draw upon my experience as a real-radio collector and try to decide what kind of transistor radios I might want to collect. (Beginning real-radio collectors buy any radio in sight at first, then learn to settle down to collecting only the good stuff.) That decision in itself was difficult. I first had to overcome the fear of what would become of my reputation if the news of my newly deviant collecting behavior ever got out. And as if that wasn't hard enough, I soon found that there really was a lot about transistor radios I didn't know.

Timidly, I ventured forth and decided that I couldn't get hurt too bad if I stuck with collecting Sony or Regency radios. But even there I found a bewildering variety of choices and prices. How could I possibly recognize which radio was a good deal when I was faced with buying a radio younger than my kids?

Maybe the approach would be to collect only one type of transistor radio, but what types were there? Small. That's what I remembered transistor radios were known for: so, logically, the smaller the radio the more collectable it must be. That decided I started by buying a tiny Motorola radio that measured approximately 2 x 3 inches. But while it was small in size, it did have six transistors, surely making it a mid-sized set in component count, and its cost put it in a league with a fairly nice collectable real-radio.

"Small" still seemed to be a category, so the question was "how small could a transistor radio be and still work?" I heard that Regency had put out a one-transistor set. But acquiring all the one-transistor sets ever made would be very time-consuming and result in a very small collection. Doubling the component size to two transistors would broaden the collecting field and lower the cost of each radio dramatically. (I am still in a daze at the price people are

paying for transistor radios.) That decision made, I embarked upon t-radio (transistor radio) collecting in earnest.

The first thing I noticed that t-radio collectors weren't as hung up on model numbers and brand names as tube radio collectors. Even a novice tube-radio collector can tell the difference between a Philco 60 and a Philco 90 with one eye, and expound for hours on the design differences in Philco vs Zenith radios. T-radio collectors seemed to find happiness in just being able to identify the country where their radio was manufactured.

Another difference was in the importance of the radio's condition. A tube radio collector often has to decide the potential value of a radio with water damaged veneer and/or the smell of mouse pee wafting out the back. Can this basket-case radio be restored to an object of beauty? The transistor radio collector is never faced with this decision.

Transistor radios, while possibly colorful and uniquely designed, competed in the marketplace as a cheaper, smaller, more personal radio, not as a piece of nice furniture. As a result, most collectable transistor radios are plastic, and many were not very expensive when new. They were often sold in cheap plastic carrying cases and housed in equally cheap plastic cases. The result was that

the carrying case often marred the cheap plastic case, a condition that cannot be corrected by even the most talented collector.

T-radios also were often marketed to younger people, who didn't want 'their father's radio'. They wanted bright colors and chrome grills. Radios with plaid fronts and owl eyed styles were/are far more popular than ones with a high component count or a unique circuit housed in a plain black case. No transistor collector would even consider trying to refinish a sky blue plastic case, even if it has severe blemishes from its cheap plastic carrying case.

There are no Neutrodyne transistor radios, and few home brew transistor radios warrant collectable status. Most are either superhets or TRFs, and there were no exotic or experimental circuits in these radios. A set made in Japan is probably more coveted than one made in Hong Kong, and a set with removable transistors more desired than one with all its components soldered in place; but, while a t-radio that plays is more desirable than one that doesn't, many are collected simply because they look good on display.

That is one of the allures of collecting transistor radios, many collectable T-radios look nice displayed, while they take up very little room. A very restrained tube radio collector, which is a collector

with ten or twenty radios, may be faced with acquiring more space for his collection by ridding himself of some surplus radios or his wife, but a transistor radio collector can accommodate both with comparable ease. What transistor radio collector has ever had to hide a new find in a friend's garage until the time is right to sneak it home?

I feel better having come out of the closet and admitting to being a transistor radio collector. I feel a strange kind of peace sharing my secret, while knowing that I'm still a novice in the transistor radio collecting arena, and recognizing that I still often have to call on Neil and others for help and advice. I'm only beginning to realize just how much I have to learn even about my 2-transistor radios, but I have already learned that collecting transistor radios is a lot of fun, and, in its way, as rewarding as collecting real radios. It is also my hope that by this admission, other real-radio collectors who are hiding a transistor radio or two in a desk drawer will join openly in the fun of this aspect of our wonderfully addictive hobby.



# "The Open Trunk" Classified

## ◆ See IFC for ad details ◆

FOR SALE: Reproduction Philco Cathedral cabinet parts. Front panels, rear arches, bottom moldings. Grandfather clock finials, colonial clock top trim and finials. Reproduction 90, 70 and 20 (std) cabinets. Other needs such as other style moldings from your sample. Inquire. **Dick Oliver**, Antique Radio Svc., 28604 Schwalm Dr., Elkhart IN 46517. (219)522-4516

WANTED: The female power (battery) plug for a Kemper portable K-52. Similar to octal except has 7 pins and two round locating pins (edge and center). • Knobs for a Crosley 601 bandbox. **Mark McKeown**, (303) 278-3908 mmckeown@tde.com

FOR SALE: • Zenith R-7000, the very last trans-oceanic made. Call for details. (303)730-8539

WANTED: Stewart-Warner model R-123 chassis, used in receiver models 1231 to 1239 (see Riders volume 6 page 6-2 for picture of chassis). • Chassis for AK 217, and Majestic 371. **Jerry Tynan**, (303)642-0553 jtynan@worldnet.att.net

FOR SALE: Copper Rod, save \$\$\$\$\$, several diameters available to make your own soldering iron tips (or I can for you). • Radio repair and restoration service. **David Boyle**, 1058 Colt Cir., Castle Rock, CO 80104 (303)681-3258

WANTED: GE clock radios, models 935 & 936. **Tom Kelley**, 971-1/2 Pleasant St., Boulder, CO 80302 (303)444-1837

WANTED: Silvertone tube shield top for model 1320, 1322 or 1324. Slotted, 1-7/8" dia.

**Wayne Gilbert**  
(303)465-0883



WANTED: Mountain Dew BB-92 • Napoleon Cognac BB-93 • Peachtree Cream BB-97 • Scotch Seven BB-100 • Mr & Mrs "T" BB-106 • 7-UP Vending Machine • Pink Panther BB-390 • Battlestar Galactica BB-447 • Batman BB-353 • Mickey Mouse (Breed 1 Plt 115)

**Ron Smith**, 145 Carr St., Lakewood CO 80226, (303)274-7522

WANTED: Old Radio magazines for my research library in Antique Radio. Need pubs like Radio Design, Radio Age, and Radio Craft -1920's thru 1940's. Will provide home, or purchase singles or full sets at a fair price. Also interested in publications from various companies; Aerovox, RCA, Sylvania, Bell Labs, etc. Likewise, need old test equipment literature and manuals.

**Charles Brett** 5980 Old Ranch Rd., Colorado Springs CO 80908 (303)495-8660

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WANTED: Old horn speaker parts, drivers and incomplete units. Also, old light bulbs with tip and good filaments.

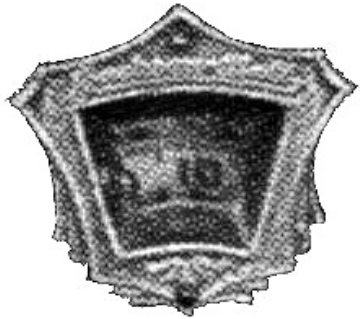
**Charles Combs**, 508 E. Daniel St., Albany MO 64402 ph/fax (660)726-3038

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WANTED: 2nd I.F. Trnsfmr coil, Grisby/Grunow ch. 460. Goes in Majestic Century Six, models 461-463 Bunis I/pg95. This trnsfmr coil is secondary audio and AVC, with six leads. **Jay Kussman** 8023 Blucksberg Dr., Sturgis, SD 57785 (605)720-7519, nipper@rapidnet.com

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WANTED: Communications gear, manuals, parts & catalogs from manufacturers such as Hallicrafters, Hammarlund and kit makers. Also, telegraph/morse keys, bugs & paddles. Cash or trade (including transistor sets). **Robert Baumann**, (303)988-2089, rgbdenver@aol.com



WANTED: Escutcheon for a Jackson-Bell Swan cathedral - pictured here and in Bunis #4 page 116.

**Ed Brady**, 1333 White Rim Pl. NE, Albuquerque NM 87112 (505)292-048, cebrady2@yahoo.com

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FOR SALE: 4,600 Radio & TV tubes, *New in original boxes*, \$920.00 (.20 ea) Sold as LOT only. Approximate value of \$20,000 if priced in "Antique Electronic Supply Catalog". **Norm Bernicky**, (719)550-5810, Colorado Spgs. norm@norbern.com

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WANTED: Novelty **tube** radios, such as books, horses, lamps houses, kegs etc. **Ray Windrix**, 617 N. Murray Bl., Colorado Springs Co 80915, (719)597-5098 or (719)596-7196

WANTED: Hoffman Nugget pencil tube pocket radio • Japanese WWII morale receiver. Will pay your price.

**John A. Miner**, (303) 759-9152 hohum@qwest.net

FOR SALE: 1935 RCA tombstone  
T6-9, \$135 • 1937 Philco cathedral  
MD37-60 \$140 • 1946 Philco  
Transitione 46-200 \$40 • 50's  
Motorola yellow leatherette & plastic  
portable 5P23WB-1 \$30 • RCA  
"12,000 Miler" table wood 56X5 \$50  
All excellent and working.

**Clyde Benge** (303)683-0624,  
cbenge@usewest.net

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FOR SALE: 2 TRF radios - brands  
unknown. One is complete and in very  
good condition, the other is missing  
the top but otherwise appears  
complete. Both for \$120. **Bob  
Schineller**, 303-682-1749 or  
rgschin@aol.com

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FOR SALE: Victorian House, 16 oz.  
furniture finish rejuvenator. A  
remarkable product for  
cleaning/feeding all wood finishes.  
removes most water and heat marks  
and covers scratches. Removes dirt and  
wax and puts oil back into dry finishes.  
Contact **CRC treasurer Robert  
Baumann** with quantity desired. Club  
will order a case of 16 bottles when at  
least 10 have been pre-paid at  
\$10/bottle.

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WANTED: White or beige knobs for a  
GE 401/410/411. They look like the  
smaller size of Reese's Peanut Butter  
Cups. **Mark Gibson**, Loveland CO  
(970)593-3032, mark\_gibson@hp.com

*Colorado Radio Collectors  
Antique Radio Club*

5270 E. Nassau Cir.  
Englewood CO 80110



**FIRST CLASS**

STAMP

**The March meeting is on Sunday the 11th at 1:00 PM  
Museum of the Americas, 863 Santa Fe (between 8th & 9th Ave's.)**