

The

FLASH!

The Newsletter of
The **Colorado Radio Collectors**
Antique Radio Club

Volume 32, Issue 5

Vintage Voltage Show - CANCELED!! - see Page 2

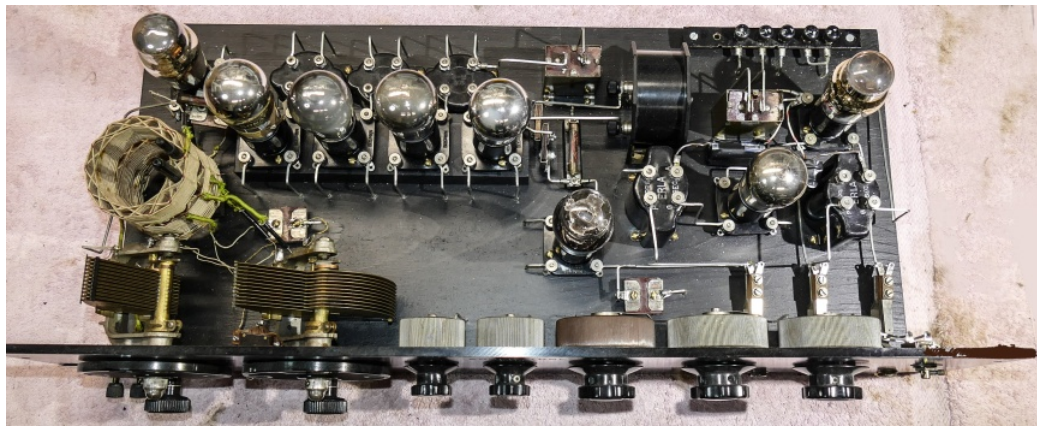
Sept./Oct. 2021

SuperTone Octette

1925 Super Heterodyne AM, Medium Wave, Mono Band, Low Fidelity,
8-Tube, battery operated, Deluxe Radio

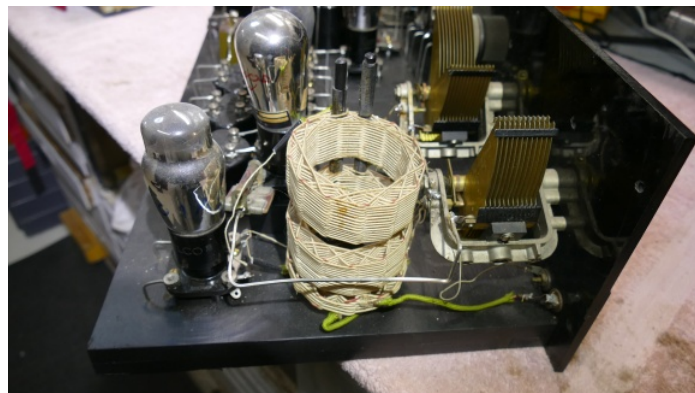
By CRC Member Rich Kuberski

Several years ago my good friend Larry Weide purchased a pile of radios/stuff from an estate. After Larry hauled all he wanted from the basement storage area he called me and said I could have all I wanted. Well, I loaded my Explorer and then called Robert Baumann who finished up this task. We all got lots of stuff.



One of the things I took was a 1925 Superheterodyne radio that one or more previous owners had worked on. I wanted an early super heterodyne radio and this looked like a good candidate and might actually be a working radio. Well, surprise, it did not work.

Another good friend, Bill Dial, master of 1920's radios, found an old magazine article that described my radio to a tee. It was a kit that sold for about \$200 at a time when that sum would buy a good used car. The magazine article (Radio in the Home, October 1925) included a schematic that was very helpful. Over a few weeks of messing with this, I found about 4 wiring errors made by the original assembler. I was confident that this radio had NEVER worked. I proceeded to rip out the errors and jumper in proper wiring. What do you know, this pile of junk does indeed work. There was a certain amount of satisfaction in this, but to look at the radio, it did resemble just a pile of junk screwed to an old board. So, I threw it up on a shelf and let it age for a few more years. Recently, I got motivated to completely rewire the radio and



continued on page 5



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Newsletter for The **Colorado Radio Collectors** club, founded in the Fall of 1988.

"Dedicated to the preservation and education of wireless, antique radio, television and associated equipment."

CRC MEETINGS: Meetings are held on the 2nd Sunday of every other month starting in January (except May is the 3rd Sunday) at 1:00 pm. The meetings consist of business, "show & tell", raffles, auctions, swap meets, technical discussions and other subjects of interest. Visitors are welcome!!

CRC MEMBERSHIP: Current annual dues are \$20 and membership in the CRC runs from July to June. New memberships will be prorated to the following June. Members are entitled to attend meetings, participate in our Fall show and our Fall auction, receive eGroup club correspondence, and receive our newsletter, **The Flash!**. Submit dues payable to: **Merril Campbell - 4723 Woodbury Dr. - Colorado Springs, CO 80915**

UPCOMING EVENTS: September 12th, Vintage Voltage Show - has been **CANCELED!!!**

Update: There is now a September meeting - September 12th - CRC Club Meeting at the Castle Rock Library, 1 PM. November 14 - CRC Club Meeting at the Castle Rock Library, 1 PM.

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MESSAGE FROM THE PRESIDENT

Hi all,

Hope you are finding the late summer weather to your liking and getting out to enjoy the great Colorado outdoors. Speaking of outdoors, I'm told the CRC auction was great with bargains galore and, as always, enjoyed by all. **Thanks to all the volunteers that work tirelessly to bring this great event to our CRC members.**

As for new business I suspect you have heard by now that, due to the uptick in cases of the Covid Virus / Delta variant, **the September Vintage Voltage show has been canceled.** While this decision is disappointing we applaud Dana Cain for making the hard decision to protect patrons of this great event.

At this writing, at-least for now, we will plan for our regular **September** meeting at the Castle Rock Library. Please check your email for any notification should this decision change.

As always stay safe and healthy.

Mike Cook

The July 2021 Club Meeting

Photos by Steve Touzalin & Larry Snyder



There were 32 in attendance including 1 visitor and 2 new members presented below.



New member
Thomas Dodds

Visitor
Bob Roth



New member
Bill Lettow

The RAFFLE



The raffle tables were full of treasures seeking new owners with proceeds donated to the club.
Rich Kuberski called out the ticket numbers.

The AUCTION

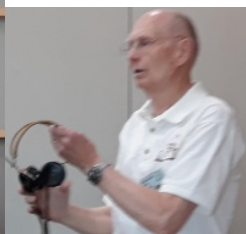
Miscellaneous equipment was auctioned off by Bill Harris with proceeds donated to the club.



Box of transmitting
tubes \$90



Heathkit Cap
Checker \$35



4 headphones
\$5-10 each



Heathkit Test
Oscillator \$20



Heathkit
Generator
\$15



Heathkit Lab
Generator \$30

SHOW & TELL



Merril Campbell discussed his nicely refinished and restored 1936 Silvertone, model 7172, including how he fixed the dial warpage caused by lamp heat & how he repaired the tuning mechanism.



Bill Harris featured his Allied (Knight-Kit) Space Spanner radio and the silk-screening method he used for the front panel & dial labeling of his "built from scratch" Ocean Hopper. He hand-crafted everything from the chassis to the cabinet to the "frames" required for the silk-screening process!



knight-kit
Model S-740 **\$11.75**
"OCEAN HOPPER" RECEIVER KIT
Tops for exciting broadcast, long wave and short wave reception. Highly sensitive regenerative-type circuit. Excellent headphone reception; can be used with 3-4 ohm PM speaker on strong broadcast band stations. Supplied with plug-in coil for standard broadcast; covers long wave and popular short wave bands with coils below. Pulls in thrilling foreign broadcasts, police, amateurs and aircraft. Controls: Main Tuning, Bandspread, Antenna Tuning, Off-On-Regeneration. With all parts and tubes (less extra coils and headset). AC or DC. Shpg. wt., 5 lbs.
Model S-740. "Ocean Hopper" Kit. **\$11.75**

EXTRA PLUG-IN COILS
S-741. Long Wave, 155-470 kc. Net. 79¢
S-742. Short Wave, 1.65-470 kc. Net. 79¢
S-743. Short Wave, 2.9-7.3 mc. Net. 65¢
S-744. Short Wave, 7-17.5 mc. Net. 65¢
S-745. Short Wave, 15.5-35 mc. Net. 65¢



Ocean Hopper ad
ca.1956

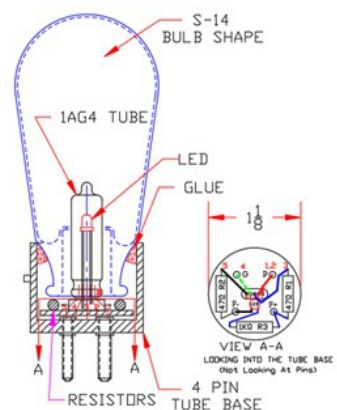
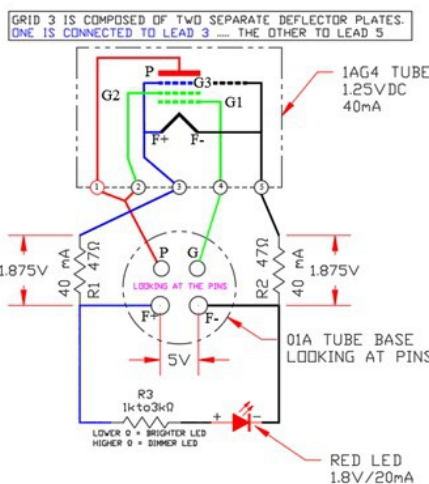
Bill with his
Ocean Hopper

knight-kit
"SPACE SPANNER"
BAND SWITCHING
RECEIVER KIT
Model S-243 **\$15.95**
Thrilling Short Wave and Broadcast

Famous 2-band AC-DC receiver in easy-to-build kit form at a very low price. Pulls in thrilling short-wave (6 to 17 mc) and standard broadcast. It's fun listening to amateur, aircraft, police and marine radio. Features highly sensitive regenerative circuit. Bandswitch selects broadcast or short wave. Has 4" PM speaker and beam-power output tube for plenty of volume; headphone connectors for weak signal listening; slide switch cuts out speaker. Uses 12AT7 regenerative detector and audio amplifier, 50C5 power output, 35W4 rectifier. Six controls: Bandspread; Main Tuning; Antenna Trimmer; Bandwidth; Regeneration; Audio Gain. Includes tubes and all parts. 7 x 10 1/4 x 6". Shpg. wt. 4 1/2 lbs.
Model S-243. "Space Spanner" Receiver Kit. Net only. **\$15.95**
S-247. Matching Cabinet for above. 2 lbs. Net. **\$2.90**

Space Spanner ad ca.1956

Larry Snyder showed his Atwater Kent 35 chassis mounted in an adjustable work cradle and talked about the '01A tube substitutes it contained that were inspired by Dave Laude's article featured in the Sep/Oct 2020 Flash! (Vol. 31-issue 5)



FILE ADAPTING A 1A4G TUBE INSIDE A SUB '01A TUBE
to make an '01A tube substitute with elimination

(continued from page 1)

mount the parts on a new base board. I had never done wiring with the uninsulated square wire, but what the heck, how hard can it be? Turns out that it's not all that bad. For a first attempt working with this wire, it is less than perfect, but not bad for an amateur. However, one thing that I did do was to conceal a lot of the wiring under the board. To put it all above the board in plain sight would have been a challenge to create a neat job.

I think this is pretty typical for a mid-1920's superheterodyne radio. It uses 8 01A tubes, has three fixed intermediate frequency transformers (some radios had 4), a manually adjusted oscillator coil, two audio frequency transformers. Power requirements are A (5 volts), B (45 & 90 volts) and C (2 @ 4.5 volts.) A 200' long wire antenna would be great, but I have it working on a much shorter antenna. With two extra stages of amplification, the audio is coming in loud and clear. It even does well driving a speaker.



Although my electronics background is close to zero, I can follow a schematic, identify components and solder a wire. My Dad was an electronics engineer and amateur radio operator (I now have his call letters W5CSZ.) The stuff I'm doing is kindergarten level compared to what he was involved in, but if he was here to participate in this hobby, he would be thrilled to mess with these old radios.

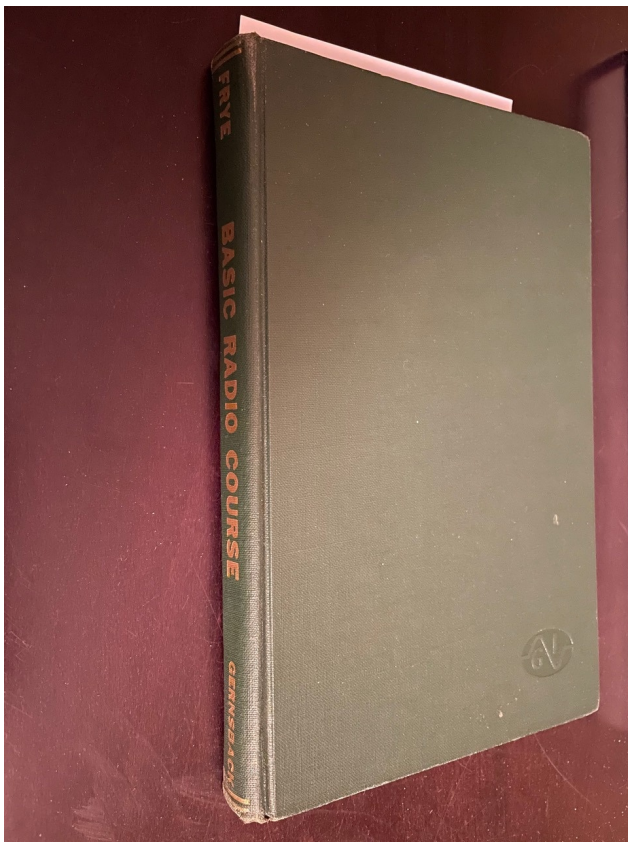


Book Review: Basic Radio Course by John T. Frye.

submitted by Paul Heller

I'm always reading books about radio, electronics and vacuum tubes. I recently came across this particular hardcover book published in the early 1950 by Gernsback Publications, Inc. It is listed as Gernsback Library No. 44. I have the third printing, dated August 1955.

The book is small, measuring 5-3/4" by 8-1/2", so it is easy to carry around. It is 175 pages and the quality of the book and the paper is excellent.



I found this book to be very good for learning about and explaining AM radios and technology. It suffers from one annoying flaw, however, which I suppose is a symbol of the times in which it was written. The author is rather sexist. Here is an example. At one point the author is discussing vacuum tube characteristics. He writes: "Each major tube manufacturer publishes a tube manual in which all the above characteristics, as well as many other items of useful information, are given for the tubes he produces. Such a book is as important and necessary to the radio technician as a cookbook to a career-girl bride". This is one of the lesser sexist statements. Ugh.

These types of comments are certainly out of place in today's society and if you cannot read the material without being able to put such comments in the proper perspective then this book is not for you.

The book does not dive into deep engineering theory. Nor does it gloss over those subjects necessary to understand radio. It is well positioned between such

extremes.

The sad thing is, were it not for the sexist comments this book would be an excellent introduction for a young person or a novice wanting to understand how a radio works. If I were to give this book to my grandson to read, I would have a lot of explaining to do beforehand – and not about the relevant technical material!

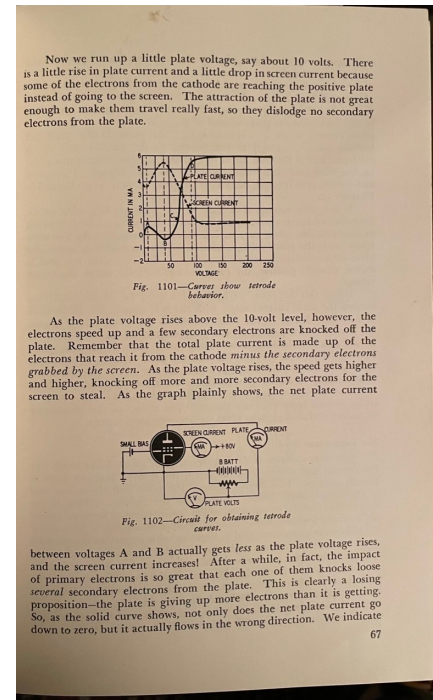
The book begins with covering basic electronics and uses very good examples to help explain things. I found his explanations of inductance, capacitance and impedance to be very clear. The material flows in a well-organized fashion, from electron theory (basic and understandable) to resistance, capacitance, inductance, impedance and phase and then to resonance and resonant circuits.

After that, he goes into transformers and then on to vacuum tubes covering the common types in an easy-to-understand approach. The author handles the electron flow path vs. current in a way that so many other books miss. B+ is explained rather well, and including why it is called B.

I found his explanation and approach towards sound and how a loudspeaker works particularly interesting.

Once he has established the foundational aspects, which takes the first half of the book, the author then goes into the various stages of an AM radio, starting at the power output stage and working backwards towards the antenna. His chapter on trapping the signal is only five pages but gets the job done in a way I've not read before. I am left wondering if I understood this chapter because of previous knowledge on the subject or if it really is as simple and understandable as he makes it.

The last few chapters end with propagation (rather simplified but good enough) and receiver refinements (the explanation of push button tuners was pretty good), and the book then ends with instruments and tools and servicing techniques. I thought his coverage of servicing techniques was rather light and would have preferred more material in that chapter. As an example, his



coverage of the topic of signal tracing (something I personally have not yet done) is very superficial and most lacking.

I would definitely say, sexist comments aside, that the author met his goal of explaining the basic principles of radio in “down-to-earth” language. I should also mention here that his illustrations are very clear and easy to follow and support the material very well.

In his final section, entitled screwdriver mechanics, he reminds us that it is necessary to think in order to service radios. I don't know about you, but I'm always thinking – how does this work? Why is this not working? How do I replace this? How do I fix that? ... Fortunately I have you, fellow members of our club, whom I can ask when I am stumped.

The August 15, 2021 Auction & BBQ

by Larry Snyder

Once again, through the efforts of club member Rich Kuberski, the CRC Auction and Barbe-que was held in the beautiful park-like setting at the Tectonic Management Group Facility located in Wheat Ridge near the intersection of I-70 and Wadsworth.

It is noted that many dedicated club members volunteered their time and efforts to perform the variety tasks associated with making the event a success. Those tasks include the installation and manning of the computer operations, the installation of the audio system, the professional-like auctioneering, the lifting and movement of the radios for the auction presentation, the cooking & serving of the burgers, hot dogs, chips, condiments, sodas & water which were provided by the club, and the bringing of tasty side dishes like cakes, cookies, deviled eggs, delicious candy-like treats along with a wider assortment of chips and other snacks. Of course, the auction needed the radios, televisions, documentation, magazines, parts, test equipment, and other radio related items to be gathered up, re-gistered, and transported to the venue to be unpacked and carried to the general display area.

The event was attended by about 57 members, non-members, wives, and one toddler, (and one dog that was not counted). For the most part buyers enjoyed items going for extremely low prices compared to previous years. The sellers not so much. Although, a few of the higher-quality, more sought after items, sold for several hundred dollars.

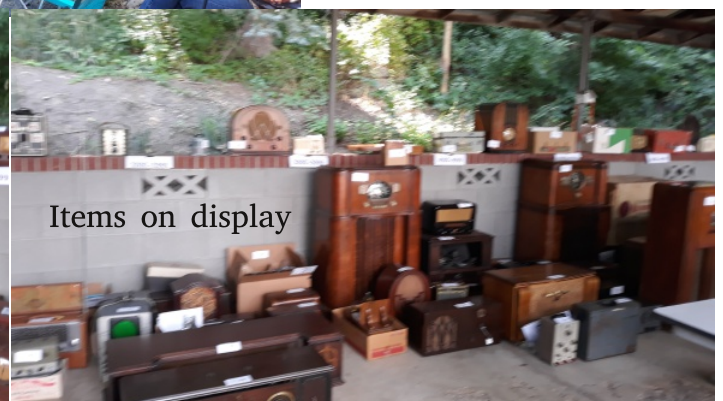
So, for all CRC members and their families, and the general public that participated in making this event a huge SUCCESS, we offer a large heart-felt THANK YOU!



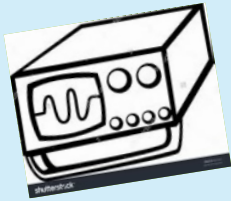
Good weather and sunshine prevailed



Items on display



Items on display



Classified Ads



Ads are free for CRC members. To place an ad send your ad description along with personal contact information to Steve at stevetou@comcast.net or Larry at Lsnnyder200@cs.com.

REPAIR SERVICE: Radio repairs for club members. Reasonable rates. Good references.
Call David Boyle 303-681-3258

FOR SALE:

Starting to gradually sell off restored radios from my extensive collection to club members and friends. Prices are very reasonable and will gladly negotiate. Range from the early 1920's to mid 1950's. Mostly wood radios from the 1930's...my favorite styles!
David Boyle
Castle Rock Area
email: djboylesr@msn.com

FOR SALE:

Tube Radios - Tombstone, Cathedral and Novelty Transistor Radios.
I have collected radios of all types for 35 plus years and now it is time to let them go to new home/s. I have over 250 tube type and over 5,000 transistor (both novelty and shirt pocket type)
Please call 303-2381384
radios4us@aol.com
Thank You,
Ron Smith

FOR SALE:

1. Radiola V (GE AR1300 & AR1400 on a wood base and wood top) Excellent working condition with tubes. Asking \$250.00.
2. Radiola AR1300 crystal detector. Good condition with replacement crystal detector. Asking \$50.00.
3. "Radiola, The Golden Age of RCA" book by Eric Wenaas, like new. good dust

covers. Asking \$25.00.

4. "Wide World" brand, unknown manufacturer 5-Tube, 3-dial TRF receiver, restored, playing. Good condition. Asking \$50.00.

5. AES power supply kit with A, B and C outputs for battery-operated tube radios. New, unassembled. Asking \$35.00.

6. Miscellaneous spark-era wireless age parts, induction coils, tuning coils, high voltage spark capacitors , etc. Make offer.

7. Several antique telephones and 3-WWII & cold-war military field telephones, etc. Make offer.

Don Wick
719-488-9469
dowick@comcast.net

WANTED:

Interested in a used, Variac/dim bulb unit: working or needs minor work (w/gauges).
Rob Beyer 719-229-6247
robmooda@gmail.com

FOUND:

A construction article for the Knight "Ocean Hopper" that was displayed by Bill Harris at the July meeting. (See page 4 in this issue). It is located in the 1955 March issue of **Popular Electronics**, page 24. If you don't have access to the magazine it can be found at:
<https://worldradiohistory.com/Archive-Poptronics/50s/55/Pop-1955-03.pdf#page=24>

VINTAGE VOLTAGE and CRC SHOW

When: Sunday, September 12th, 2021

CANCELED !!

Has been tentatively re-scheduled for March 27, 2022 !!!

SUBMISSION OF ARTICLES & AND ADVERTISEMENTS

Classified Ads and articles of any radio/electronic or historical related subject to be published in The Flash! are encouraged and welcomed. The article(s) should be submitted in **Microsoft Word, OpenOffice, RTF, or as plain text**, to Steve Touzalin by email at: stevetou@comcast.net or Larry Snyder at Lsnnyder200@cs.com or by postal mail to 417 So. Queen Circle, Lakewood CO 80226. Formatting isn't necessary as it won't transfer into our software, but if you do, set the font to Times New Roman, size 10, left justified. If you have graphics (.jpg files) to be inserted, please name them and be specific about how you would like them placed. We will do our **best** based on space limitations.