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

Volume 28, Issue 5

The November 12th meeting is at the Miller Library in Castle Rock

November/Dec. 2017

Editor's Note: Hello! I'm new at this and figuring things out as I go, please excuse any typos, missed names, wardrobe malfunctions, or any other slip-ups! Also, thanks to Rich for an older issue to use as a template. –Brian

CRC Auction 2017



An Emerson from 1940, purchased by CRC's favorite new editor of The Flash!

Auction Stats	
Total Sales	\$7340
CRC Commission	\$704.50
Donations	\$335.00
Total Raised for Club	\$1039.50
Number of lots (including no sale)	199

Top 5 Hammer Prices Silver Marshal (Model/Year Unknown) Jackson Bell Model 62 from \$350 1930 Stromberg Carlson Speaker Model 5A Majestic Model 194 from \$190 1933 Zenith Model 288 from 1934 \$165



COLORADO RADIO COLLECTORS ANTIQUE RADIO CLUB

Founded October 1988 The Flash! © 2016, all rights reserved

Message from the President

Wayne Russert

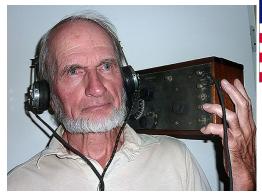
Although the Vintage Voltage South show didn't bring in the desired attendance, we did have a lot of folks visit our club display, signed up a new member (maybe 3) and educated a few kids along the way.

At our upcoming Sunday, Nov. 12 th meeting in Castle Rock we will have some equipment brought in by Dr. Jeff Keeler (NCAR-Ret.) for raffle, auction, etc.

Here is his list:

- NBS-1: A National NC-183; SN 248-022, one of the older ones.
- Scott radio with speaker both fairly large & amp; heavy
- Airline / Montgomery Ward Series 8A32
- Heathkit FM receiver built in 1966
- Hitachi 12VDC portable TV (1980?)
- Tube audio amp
- Reverberation unit
- Maybe some others ...

Dr. Keeler is downsizing and the above items are surplus. All proceeds will benefit the



I appreciate that our club avoids the hectic holiday season by not having an event in

December. However, to set the mood for the holidays here's a suggestion. Look around

the shop/shack and find a few items that you can part with. Put them in a grab-bag, mystery box or whatever and slap on a festive bow. (Your wife will show you how)

We'll all have our first gift of the season courtesy of the raffle table.

We may even come up with some hot cider and cookies for the meeting.

Looking forward to seeing everyone on the 12th at 1 PM

Wayne Russert



CRC CONTACTS

Wayne Russer 303-660-<u>3799</u>

Vice President
Treasurer
Merrill Campbell
719-596-3482
Campbell321 at juno.com
Mike McCutcheon
(303) 343-2956
ugea07 at denvercommons.net
Egroup message posting address:
colradeol at yahoogroups.com
Flash! Publisher
Steve Touzalin
(303) 988-5394
Stevetou at comeast.net

Stevetou at comcast.net Flash Graphic Editor Brian Buell

Brian J Buell at gmail.com
Vebmaster Bill Grimm
Vebsite www.radioace.com
VOTE: at = @ in email addresses

Upcoming Events

Meeting

Meeting Locations

(Unless noted otherwise)

Castle Rock May September

CRC MEETINGS

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

CRC MEMBERSHIP

Annual membership in the CRC runs from July to June. Dues entitle members to attend meetings, "The Flash!" our newsletter, discount book prices, participation in our spring show and Fall auction. Current annual dues are \$20. New memberships will be prorated to the following June.

CRC.

CRC Auction Photos



Bidding while the sky isn't falling



Auction Recorders hard at work



Tom tirelessly volunteering as auctioneer



Taking cover during rain



Rain, rain, go away!



Leo Baekeland: The Father of the Plastic Age

Submitted by Robert Baumann, CRC member.

Many of us take it for granted today. We normally don't give it a second thought, but you can find it in nearly all aspects of daily life.

Used to make everything from toothbrushes and disposable razors to televisions, radios, household appliances, cars, toys, bottles, even lightweight firearms, plastic is arguably the most important synthetic material ever formulated. And ironically, the inventor of this revolutionary product has faded into obscurity, eclipsed by his own brilliant creation.

Born in Ghent, Belgium, in 1863, Leo Baekeland was a man of humble origins and great intelligence.

Drawn to the sciences

The son of a shoemaker and house maid, he possessed a natural inclination for the sciences, especially chemistry. Unlike the majority of those within his social class, Baekeland attended school regularly and was a superlative student.

At 17, he graduated with honors from the Ghent Municipal Technical School, winning a scholarship to study at the University of Ghent. Just four years later, he had earned a Ph.D. in chemistry and remained on campus as an associate professor.

In addition to teaching physics and chemistry, Baekeland began his own scientific research. In 1887, he'd reached his first milestone as an inventor when he pa-

tented a photo-developing process that used water in place of noxious chemicals.

With this feather in his hat, he traveled to New York City, where he met Richard Anthony of the famed E. and H.T. Anthony photographic company. Immediately, Anthony recognized his talent and offered him a job as a chemist with the firm.

Backeland accepted the offer and stayed with the company for a short time before leaving to start his own business as a consultant and independent researcher.

Velox

Throughout the early 1890s, he worked tirelessly to create a photosensitive paper that allowed photographers to print enlargements by artificial light. He called it Velox.

To produce and sell his latest invention, Baekeland enlisted the financial support of investor Leonard Jacobi and founded the Nepera Chemical Company in Yonkers, N.Y.

The venture was a quick success. In fact, it did so well that, in 1899, photography mogul George Eastman of Eastman Kodak bought Nepera from Baekeland and his investors for an astounding \$750,000 (the 2016 equivalent of over \$21 million).

A mere decade after coming to America, Baekeland had made a fortune and was, as he put it, "a free man, ready to devote [himself] . . . to [his] favorite studies." Although Baekeland never had to work again, a life of idle luxury didn't appeal to him.

In 1904, he purchased a spacious estate in Yonkers, where he built a fully equipped laboratory. Temporarily locked out of the photography business by a noncompete clause in the Nepera sale, Baekeland began looking for another scientific project with commercial application.

The birth of Bakelite

With the rise of electric light, the demand for wiring was at an all-time high. Manufactures had plenty of copper, but the materials used for insulation (namely shellac and vulcanized rubber) were either scarce or inadequate.

So Baekeland decided to search for a synthetic substitute—something that was strong yet moldable.

He'd read about a pair of German chemists who, in the late 1800s, had created a shellac-like substance by mixing phenol, formaldehyde, and hydrochloric acid. This, however, produced a thick resin that, when heated, became brittle and full of holes.

Backeland believed the problem was in the heating process itself. To test his theory, he devised a heated pressurizer to cook the resin.

Set to 100 pounds per square inch, the container heated the resin yet suppressed the bubbly gasses that had been weakening the product's composition. Now, the resulting material was hard and durable.

On July 11, 1907, Baekeland filed an application for a patent on his invention, which he called Bakelite. In his diary entry for that day, he remarked, "Unless I am very much mistaken, this invention will prove important to the future."

He had no idea how right he was. Because manufacturers could inject Bakelite into a vast array of molds, they could make virtually anything imaginable with it. By the 1930s, clocks, lamps, telephones, cameras, radios, utensils, handgun grips, and automobiles utilized Bakelite in some capacity. Impervious to moisture, the synthetic material was rugged and cheaper than its organic counterparts.

The Plastic Age was born and, until his death in 1944, Backeland played an active role in its evolution. Almost three-quarters of a century later, his name may have faded into obscurity, but evidence of his genius can be seen everywhere.

1. Originally published at https://www.ericksonliving.com/ tribune/articles/2016/12/leo-baekeland-father-plastic-age, by Michael G. Williams on December 7th, 2016. Permission was obtained to re-publish the article.

Editor's "I need to fill some space" article: Aqua Coat Woodgrain filler

Submitted by Brian Buell, The Flash editor

This is something I've been meaning to write about for a while, even before I became editor of The Flash. Now that I am editor, and I need just a tiny bit more content, here goes! This may just be a regular thing.



When I restored my Zenith 7J045T, I had to reveneer everything. The original veneer was a mahogany-like print on a fairly thick panel, with some pretty large chunks peeling or missing. I stripped all that off, and put some new veneer on (2 layers: a presentation mahogany veneer on top of the cheapest thick veneer I could find, just to keep the original look)

After I had the wood put on the cabinet, sanded, and stained, I still had lots of open pores in the grain. The original was smooth, and had a bit more of a reddish tint than my stain did. Looking online, I found out about a relatively new grain filler called Aqua Coat. It's a water-based gel grain filler, which mixes very well with dyes (either liquid or powder pre mixed with a little water). I added a few drops of red dye to 14 grams of grain filler (for consistency, I used a cheap digital kitchen scale to get the same amount of filler). I applied a few coats with a squeegee and cloth, then sealed it up with a few coats of lacquer.

Did it go perfectly? Of course not. But since this was my first time really working with wood to that extent, it could have gone much, much worse! Any issues should be blamed on the craftsman. The product itself was a dream to work with, and I definitely ended up with a smooth finish!



Photos from the CRC August 28th Meeting.



Ralph Brands showing his Packard Bell 35H



Packard Bell 35H Closeup



Bill Harris' volt and amp meter from late 1800s



Yuriy's stereo record



Robert's Western Electric telegraph testing unit



Steve Touzalin's 6A4/LA tube



The Open Trunk Member submitted advertisements



REPAIR SERVICE:

Radio repairs for club members. Reasonable rates. Good references.

Call David Boyle 303-681-3258

11/09

For Sale: by Dave Boyle

Most of the following instruments have been completely refurbished, repaired as needed, and calibrated. Most have manuals and test leads.

Prices are negotiable...please make offer.

- 1) Eico 5 inch oscilloscope. Model 425. Perfect for old radio repair work. Completely electronically rebuilt with **new** \$68.00
- 2) Eico "Professional" VTVM, 6 inch me-\$40.00
- 3) Ballantine Labs. Model 321 VTVM. True RMS and p-p measurements. 19 inch rack mounting \$25.00

Radio Chassis For Sale:

1) RCA Radiola Model, 80, 82, 86 complete dual chassis and mounted speaker. VG condition, with tubes including 2ea VG 45 tubes. Make offer. 2) Philco Model 91. Complete working chassis with 12" good speaker. Working tuning meter too! Make offer. 3) Philco Model 37-610 complete chassis with tubes, good condition complete with bezel and glass. Make offer.

Call David Boyle. 303-681-3258

09/15

Wanted: 1920's Wooden Horn Speakers and a Crosley Musicone Speaker.

Also 1920's battery sets, especially Neutrodyne sets, Pre 1930 AC Radios and a Crosley Widget Console Radio Michael O'Leary 602-354-7011 moleary9@cox.net.

Wanted: To buy: 1948 Motorola 5A9B portable radio, Maroon color. Good condition only. Dewey Reinhard

deweyfly30@gmail.com

719-596-5516

WANTED: Broadcast or recording mics, especially from 20's to 1950's. Crosley Pup Info

NBC chimes, all eras.

Tom Keeton

303-797-8073

For Sale: Patterson PR-10, 1933 Amateur Radio Receiver.

10 tubes, fully electronically restored. View on the internet.

Best reasonable offer.

David Boyle.

303-681-3258

I have collected radios of all types for 30 years and now it is time to let them go to new homes.

Please call me for an appointment to see if any of them would fit in your collection.

I have tube radios including Tombstone, Cathedral, and Novelty etc.

I also have a large collection of transistor radios both shirt pocket and Novelty type.

Please call 303-238-1384 Thanks in advance. Ron Smith

RADIOS4US@aol.com

WANTED to buy: 1980s Atari 520 or 1040 ST computer components (keyboard, monitor, etc.). I still need it for several specialized programs I wrote including a simulator for transistor and tube circuits. **Dave**

Laude dlaude1@msn.com

FOR SALE:

- AK breadboard no. 4700 model 10C, excellent condition, operating, asking \$900 with tubes OBO.
- Rare "The Radio Shop", Sunnyvale, CA, Echophone model A, 3-tube (regen. detector + 2-audios), excellent condition, operating, asking \$150 with tubes OBO.
- "Wide World Broadcast Receiver", manufacturer unknown, 5-tube TRF (2 -RF+gridleak detector+2-audios), good condition, nice cabinet, operating, asking \$75 with tubes OBO.
- Also have 1920's battery sets, telephones, WWII field telephones/ telegraph, telegraph sets, toy electric motors.
- Toy stationary steam engines, Cretors popcorn wagon steam engine, clocks, misc. electrical/radio parts.

Come see what I have! Don Wick Monument, CO 719-488-9469 dowick@comcast.net

For Sale: Fada Special 6 tube TRF Complete and intact

\$100 OBO Don Adams

djadams42@gmail.com 303-776-3180



SUBMISSION OF ARTICLES & AND ADVERTISEMENT

Classified Ads for The Open Trunk 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, RTF, or as text cut/paste into your email. Submit to Steve Touzalin by email at: stevetou@comcast.net or by postal mail to 417 So. Queen Circle, Lakewood CO 80226.

Formatting isn't necessary, 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

The November 12th 1:00 meeting will be at the Miller Library in Castle Rock



Directions to Miller Library in Castle Rock

From I-25: Take the Plum Creek Parkway, exit #181.

Turn East onto Plum Creek Parkway. Turn Left (North) onto S. Wilcox Street and continue north 2 tenths of a mile.

The Philip S. Miller Library is on the east side of the street at 100 S. Wilcox St.

The building is towards the back of the parking lot, past the Dairy Queen.



Colorado Radio Collectors Antique Radio Club 417 S. Queen Cir. Lakewood CO 80226

FIRST CLASS MAIL