



▶ Steve and Nancy Atway did a demo on creation of jewelry



▶ Antique computers, calculators and slide rules



▶ The Zenith 1938 robot tuning shutter dial

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NEW MEXICO

RADIO
COLLECTORS CLUB

Next NMRCC meeting: December 13th. 2015 Holiday Party—Unusual Devices/Stump the Experts

'My feeling is that the wall type of console is a monstrosity that should never have existed. It was originally copied from the old type of phonograph and we the manufacturers have persisted in producing it year after year. The radio never belonged against the wall. It belongs alongside of a chair... Commander McDonald

Zenith 9S244 9-Tube Shutter Dial Chairside Radio by Richard Majestic

This beautiful 1938 chairside is Zenith's most famous and collectible year; it's a 9S244 chairside. It has the extraordinary "Motor Drive Robot Shutter Dial" and green tuning eye. I purchased this radio from a eBay seller in northern Ohio. I paid \$105 for it and drove to get it but also went to the MARC Radio Convention in Kalamazoo. The radio was a disaster, dents, finish worn off, no dial glass so the shutter dial was just about gone.

Chairsides

Sometime after 1930, McDonald had a chairside radio special-built for his yacht, the Mizpah, and found it to be "the way a radio should be made. His personal success with a

radio of this type initially drove his desire to add such a model to the Zenith line. Zenith issued a press release in June 1936 announcing improvements in the Big Black Dial and the introduction of a new model, the "end-table" radio. In addition to McDonald's personal love affair with the model, his prior experience in the automobile business led him to a different reason to introduce the chairside, which he clearly articulated to other manufacturers as well as Zenith dealers and distributors:

My feeling is that the wall type of console is a monstrosity that should never have existed. It was originally copied from the old type of phonograph and we the man-

(Continued on page Four)



IT'S A PLEASANTLY LAZY LIFE IN THIS "ARM CHAIR RADIO" AGE

It was enough that radio of yesterday brought the world into our homes. But today's radio must do more and it does! For today's arm chair radio gives "lazy tuning" – Finger-tip next – companionable.

In fact, today's Zenith Arm Chair Radios write our listening—no longer penalize use by demanding that we rise or cross the room each time we change stations.

Once more a year ahead, the 1938 Zeniths offer the only wide selection among monumental most convenient "Lazy Tuning" radios—twenty-nine Arm Chair Zeniths from \$29.96 to \$190.00 in addition to sixty-two Table and Console Zeniths from \$19.95 to \$750.00.

Try one of these companionable Zeniths beside your favorite arm chair—without obligation—today—through your nearest Zenith Dealer. Tune in The Zenith Foundation—most unusual radio program about the subject of the hour—telepathy and success. Over NBC Blue Network every Sunday at 10 PM, EST.

The NMRCC Meeting Minutes by John Hannahs

Minutes from 11-8-2015 As always the auction begins at 1:00 pm. Unfortunately people showed up late or were absent. What a great chance for a big deal! Big boxes of Textronix scope parts went for a buck each.

A TV pattern generator went for a dollar. Some expensive camera lenses went for \$3.00. A nice Tek scope cart went for a buck. Antique radios didn't make minimum price. This proves either we are going into a recession or you must have to have critical mass for a good auction. December's Christmas meeting will be at the Mark Toppo residence in Rio Rancho so it will be a big deal. Bring your sale stuff.

Steve and Nancy Attaway did a dynamite presentation on creation of jewelry using 3D scanning and printing technology. Nancy is a lapidary artist and Stephen is the technocrat that uses state of the art equipment to create gemstone pendants, bracelets, rings, etc. of gold or silver. They are indeed exquisite.

<http://www.attawaygems.com>

The Attaway system consists of a high res digital camera and projector, a PC running expensive software, and a David 3D scanner configuration. Look:

<http://www.david-3d.com/en/>



[Home Attawaygems.com](http://www.attawaygems.com)

Featured Rings Featured Earrings

So why would we be interested in 3D printing? Suppose you restored an expensive antique radio and it is missing a unique knob or bezel. Some of these replacements are just not available or hunting for one is too time consuming. The answer is to re-create one. Of course a sample part is needed. It isn't necessary to purchase the system as services are available. You can have one created in plastic or metal. It isn't a cheap solution, but the results are great and well worth the money if it boosts the cost of a restored antique radio to justify an investment. Our members have tried this method and it works well. A minimum investment to do a turn-key

3D system would probably range from between \$2500 for a used one, clear up to \$25,000+ for a new 5 axis system. The most common types are the additive ones where wax jet buildup creates a resin based part that can be recreated by lost-wax method or by electroplating the plastic finished part. Alternative CNC 3D printers for subtractive cutting are also used to replicate the subject matter. In any case skilled hands are needed to do the finish work and here is where people like Nancy get involved.

Sometimes pieces need to be connected together and now laser weld comes into play. Yag Rod laser systems start around \$15k; many full service jewelry shops have them.

3D printing processes are moving at the speed of light. So yesterdays equipment tends to get obsolete quickly. The industry has been using 3D dentistry for some time and some of those are probably on the market and can be connected to a modem. The usual problems of pirated software exist and so the lawyers are kept happy. Shown here are couple of systems being developed here at the Quelab. 3D printing is one of our fastest growing industries. It will create many new jobs and maybe eliminate some old ones. The possibilities are endless. Albuquerque happens to be spawning ground for 3D technology, thanks to Sandia Labs and others.

Show & Tell Early Computing Devices- Richard The Majestic brings a 1920's version of a pocket calculator called the Tasco Arithometer; look on eBay if you want one.. no batteries required, but about \$50 is. Amazing product for the times. Early hand-held calculators such as the 1979 HP41CX were programmable and go today for around \$400, see eBay. Also we saw the infamous TRS-80 by Radio Shack and sometimes called the "Trash 80" model 100 laptop computer.

Of course Steve Shepard brought in mini-computer panels that were rigged with binary flashing lights. Included was the Altair Model B, circa 1987, the IMSAI 8080, and the DEC model PDP11. Another unique item was a center needle panel meter that pointed to octal numerals; something he got from the bowels of Sandia, no doubt.

Don Menning's son brought in an interesting core memory matrix that appeared to be octal configuration with 20mil cores. Now that had to be a very expensive item for the time, probably mid or late 60's.

NMRCC 2015 MEETINGS

Dec 13th - Unusual Devices/Stump the Experts- Unusual tubes, light bulbs, transistors, and radio parts. Also, who can identify that strange gizmo you found, or explain how an unusual object works?

- Officers Nominations for 2016
- Meeting topic selection

NOTE:

- ⇒ I will not be your Treasurer for 2016, I took over the job when NMRCC had about (\$500) deficit and I'm leaving the job with \$3,649.90 in the NMRCC bank account.
- ⇒ I'm not going to continue the monthly newsletter, I'll do one when I feel like it or I have content from the membership or someone else wants the job.

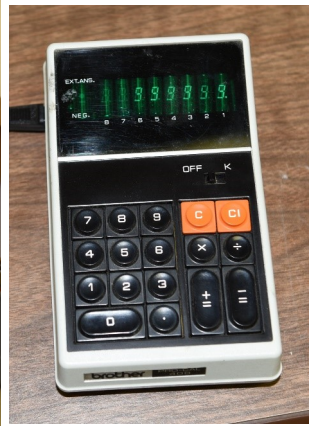
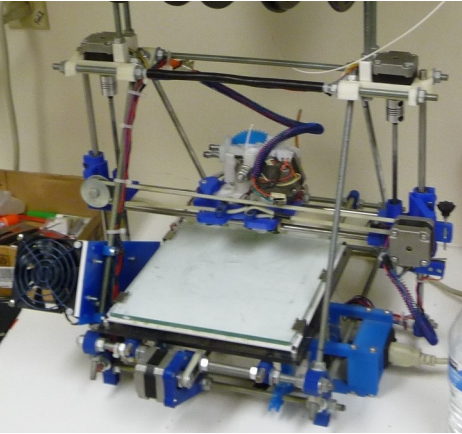
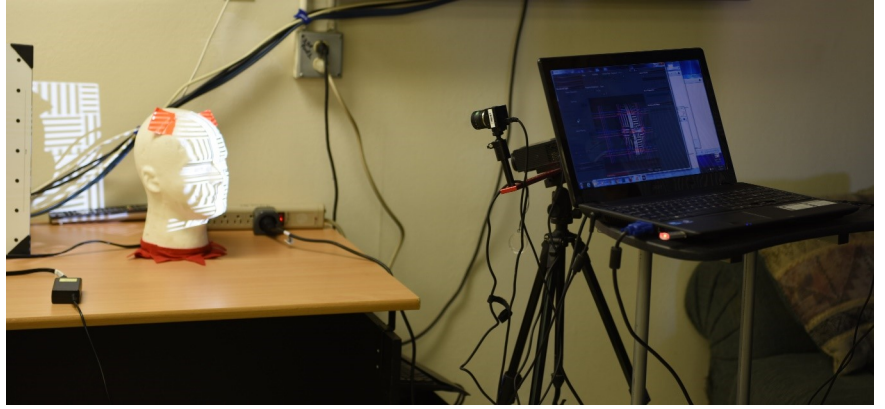
I never got a chance to show off my Mark 7 Jeppeson aviation circular slide rule. I never got lost, ran out of gas or runway, or missed a way point so long as it was in my shirt pocket.

Steve always wows us, and so he won the Sow-N-Tell again. EOM ~John Hannahs

NMRCC Officers for 2015

- *John Anthes: President*
- *John Estock: Vice President*
- *Richard Majestic: Treasurer*
- *Chuck Burch: Secretary*
- *Ron Monty: Membership*
- *Mark Toppo: Director*
- *Ed Brady: Director*
- *Ray Trujillo: Director*
- *John Hannahs*
- *Richard Majestic: Newsletter Editor (President pro-tem)*

NMRCC 11/8/2015 meeting photos



ufacturers have persisted in producing it year after year. The radio never belonged against the wall. It belongs alongside of a chair... If we can get each of the major manufacturers to bring out a set of these models, I know we can change the trend to such an extent that when a woman goes into a neighbor's home and glances at her wall type console she will say, "Oh, you have one of those old fashioned wall types of radio."...I firmly believe if the major manufacturers will get behind this, we can obsolete the console types of radio, and create an enormous replacement market. By doing this we would only be taking a page out of the automobile manufacturer's book.

The first group of Zenith Chairside models were part of the Stevens-designed Zephyr Line, the 6S147, the 7D148, and the magnificent 10S147. Philco and Emerson responded to McDonald's call for a chairside revolution and also quickly brought out chairside models. By May 1937, sixteen new chairside models were introduced at the Zenith Sales Convention in the Stevens Hotel in Chicago, enhancing the single model from the previous year, which had been over-sold from its introduction." Zenith embarked on a massive publicity campaign through the RMA in an attempt to replace consoles with chairside, however, the chairside never caught on to the ex-



Living room from the set of the 1939 Columbia picture, *Blondie Meets The Boss*. The Zenith radio next to the sofa is a model 9S244 chairside. *Courtesy of Zenith.*

tent expected; their production was stopped at the beginning of the war and their brief resumption after the war was unsuccessful.

Restoration of my Zenith 9S244 Chairside radio

When I picked it up the radio it was covered with used plastic drop clothes that were held in place with duct tape and a

check of cabinet condition was nearly impossible. The before and after pictures show the poor condition. I dismantled the radio removing the inner chassis and speaker sub-frame and then the bezels, there was no dial glass. The knobs had fallen off in the trip home and only two, the small tone control and inner tuning knob were worth saving. The band switch lever needed straightening but polished up well. With chassis and speaker removed from the inner frame I started re-gluing every joint, after a good cleaning. I purchased a piece of new, same pattern grille cloth. Using lacquer thinner removed all the face panel lacquer down to the original filler-stain. A few coats of light medium brown Mohawk lacquer darkened up the surface nicely and then I applied six coats of clear lacquer sanding between coats.

The Chassis

Some time ago I purchased a 7S2XX donor chassis and it had a very good shutter dial and both pointers and my 9S244 badly needed a new shutter dial. The 7S2XX, the 9S2XX and 12S2XX all have the same MW and two SW bands, so I did a swap. The purchased a 8.5" convex clock glass for the dial was installed. All the tubes in the 9S244 were bad, all but one original tube shield was there, the electrolytic can was still in place. The tuning capacitor grommets were still good. I cleaned the chassis, Windex and paper towels, put all NOS tubes in the sock-



(Continued on page Six)

A FELLOW ON VINTAGE TUBE AMPLIFIER @ 22.5° BELOW THE EQUATOR

A FELLOW ON VINTAGE TUBE AMPLIFIER @ 22.5° BELOW THE EQUATOR

From: fazanoquantun
[mailto:fazanoquantun@yahoo.com.br]

Sent: Tuesday, September 22, 2015
9:09 PM

To: rmajestic@msn.com

Subject: a fellow on vintage tube amplifier @ 22.5° below the Equator

Dear Mr. Majestic

Please let me introduce myself as a fellow in TCA (Tube Collectors Association). I have been dealing with antique radio issues for many years. For your better understanding of my activities in the preservation of the memory of Electronics I invite you for a visit in my website at: www.fazano.pro.br

Over those cooperative years for TCA and AWA led me to meet many US fellows among them Lud Sibley which kindly furnished me your e-mail address. I have been reading your nice article on McIntosh MC-60 tube amplifier in the TCA bulletin, October issue. Considering I am a vintage audio freak, certainly your article arose me a great interest to contact you to exchange experience on vintage tube audio matters.

First of all vintage audio tube apparatus in Brazil are quite rare and generally when available prices are in the stratosphere. Probably that's why Brazilian article in this amazing collecting field is so rare also.

OK after the afore briefing please let me introduce my small vintage tube audio apparatus collection:

One Harman Kardon citation II amplifier – famous Stew Hegman circuit.

One Quad II set: comprising two Monobloc power amplifiers, one stereo amplifier – the famous Peter Walker machine from England using two each matched pair KT-66. Neither Chinese nor Russian. They are genuine Genalex Golden Lion! God has Blessed me!

Finally a McIntosh set for operation in stereo mode comprising:

2 x MC 30 power amplifiers

2 x C-8 pre amplifiers

Starting our conversation I would like to exchange experience with you on MC-30 regarding the use of the original military 1614 over the standard 6L6. Even considering I have several tube testers as the military TV-2, Jackson 658 and Heath TT1A up to now it was impossible to find a lot of 1614 which could me led to select four of them in pair matched. So, I am eagerly looking for an authoritative com-

ment on such matter. Internet! Well I found some but frankly speaking I noticed passion instead of precisely technical evaluation. Also my MC-30 amplifiers are using 5U4 as rectifier. After reading your article I was excited with GZ 34. I have several of those original tubes as a replacement for my Quad II Monobloc duet.

So, considering your expertise on output / rectifier tubes for audio application probably you have done some studies on 1614 over standard 6L6 as well as GZ-34/5U4. Certainly MC 30 are older than yours MC-60. However probably you have some experience with those amplifiers also. If so please drop me a few words on the same.

Regarding Citation II and Quad II tubes I prefer to postpone audio experience for a next opportunity.

To keep such message as short as possible and since a photograph worth thousands of words I have attached a photograph of part my listening room and the audio machine available. A final word. Since Brazil is tropical country, during the Summer temperature reaches around 35°C to 38°C and in the Winter 12°C to 20°C maximum. So besides the nice sound from my JBL L-112 driven by the two MC-30 the 6L6 glows grants a nice relaxing touch in the environment when listening music on evening. Certainly by using the 1614 probably I shall be losing such amplifier psychological touch!

I thank you in advance for your kind attention and certainly I shall be waiting for your reply anxiously.

Best regards from your fellow on vintage tube amplifiers @ 22.5° below the Equator.

Carlos Alberto Fazano
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Brasil
04006-050

Dear Mr. Fazano,

I was a pleasure to hear from and your very nice comments about my TCA article. Over the years, many years I have owned many tube and transistor audio amplifiers. I also have designed and sold many bipolar and FET transistor amplifiers. The McIntosh amplifiers have always been my favorite since 1959 when I got a MC60 and C8 preamplifier. I also bought a C20 preamplifier in 1960 which I hated because it has too much crosstalk (poor separation) and went solid state in

the mid '60s but finally, not liking the sound quality bought a used Marantz 7 in 1969, which I still have, still listen to and use in my office with a pair of MC60s.

The McIntosh tube power amplifiers are the most accurate power amplifiers ever designed and also the best sounding amplifiers, they exceed in performance over all but the top few solid state amplifiers. The main reason for this is the lack of crossover distortion which 99 out of 100 solid state amplifiers have and we can hear this distortion. Also, McIntosh tube power amplifiers, when over driven clip just like the best solid state amplifiers, no ringing, no reverse flat topping and no recovery anomalies found in many other tube power amplifiers.

To answer your question, I also favor 1614 or the metal 6L6 tubes for their consistent tube to tube grid to plate current tracking. You can find similar performance with RCA 5881 from the same production run, if you can find them. If you are going to use the GZ34 rectifiers, which will boost the B+ voltage, I would recommend using only the 1614 or metal 6L6 output tubes. I do not recommend using EL34/6AC7 tubes because the filament current is 1.5 Amps versus 0.9 for the 6L6 and the grid to plate current curve is very different.

Just remember that if you use the GZ34 the B+ will be increased but the bias voltage for the output tubes will remain the same, so the plate current will go up. Back in the '60s I worked part time in a hifi store and we did many McIntosh clinics and the McIntosh technicians always recommended that we use 5V3A rectifiers, they will last longer and they boost the B+ a small safe amount that will not cause output tube life problems.

Let me know how make out with your McIntosh system.

Best regards,

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ets, including a metal 6F6, an ST style 5Y4G and 6U5 because I only have one 6T5 in my collection and it belongs in my 15U269, someday.

Then, under the chassis all bearing and motor were disassembled, cleaned and lubricated. New "O" rings used for the two belts were installed. Then the usual replacement of all paper foil capacitors with metalized polyester capacitors. All electrolytics replaced and resistors checked for value; none needed replacement. With the field coil 10" speaker connected, the chassis was powered up, it worked fine. A full alignment of the IF transformers, then the oscillator and RF trimmers. Typical Zenith performance is 30uV on the MW band and 10uV with a S/N of 30dB; this chassis didn't disappoint, it works well.

Bezels and Knobs

The bezel was cleaned with Windex and then lacquer thinner, then sprayed with medium brown Mohawk lacquer to the original tint color. The two original knobs were cleaned with lacquer thinner and sprayed with clear Mohawk lacquer. The other knobs were purchased molded plastic replacements. I might spray them with lacquer to make them look like wood, in bright light they look like plastic knobs.

The Cabinet and Sub-Frame

I persuaded Mark Toppo into working on my 9S244 cabinet, repairing and refinishing the cabinet and as you can see he did a stellar job. The inner sub-frame was falling apart with only a few original nails holding it together. I opened all joints and using Titebond III wood glue glued and clamped it back together. A few days later stripped and refinished the top dress panel and then glued the original design but new grille cloth in place using Titebond I wood glue (Titebond I wood glue is water soluble so if later the grille cloth needs to be removed it can be removed). With all clamps removed I installed the speaker and chassis, and later the bezel with the knobs. The sub-frame was now ready for the cabinet.

A few weeks later I received the restored cabinet from Mark, it looked great. I then cleaned and installed the sliding glass dial cover, turned the cabinet upside down and put the radio sub-frame inside the cabinet. there is an alignment hole in the sub-frame face panel and pin sticking out from the underside of the cabinet top and this aligns the sub-frame to the cabinet. four wood screws secure the sub-frame in the cabinet.

With an antenna wire connected and the AC power cord freed, I turned the cabinet over and now had a very nice original looking Zenith 9S244 Chairside radio. It's quite small so it fit nicely in my already

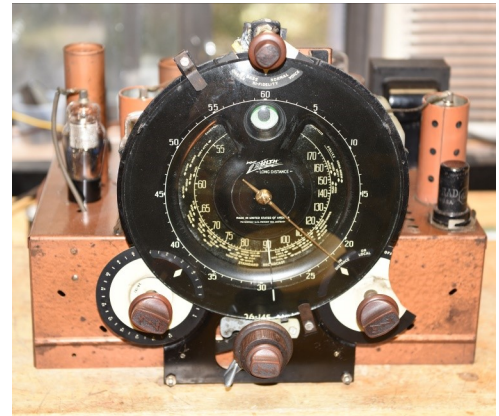
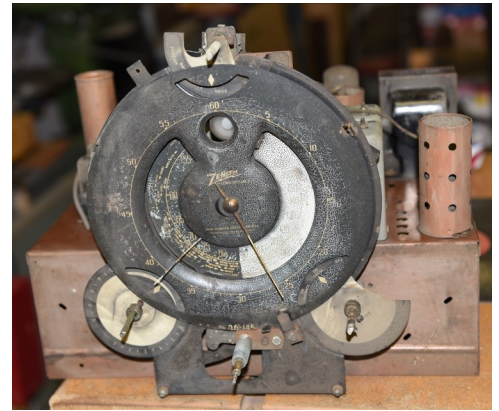
radio cluttered great room (living room). The Zenith 9S244 works fine and has very good sound quality, the 10" speaker in the small cabinet is a good match.

~ Richard Majestic

References:

Zenith ad From the 1938 Life magazine

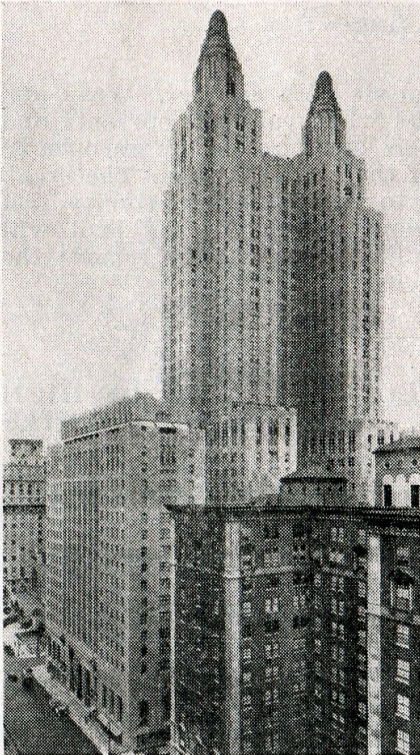
Quote from Schiffer Illustrated Catalog and Database 1936-1945



Some Before and After pictures of my Zenith 9S244 chairside radio



All-Wave Radio in 2000 Rooms



The Waldorf - Astoria Hotel New York City. 2,000 guest rooms are supplied with 6-channel all-wave reception.

BY far the largest all-wave Radio receiving system in the world will become a reality at the Waldorf-Astoria Hotel, New York City, when the already elaborate Radio system, which the hotel has operated since its opening, is further augmented by short-wave receiving equipment now rapidly nearing completion.

The hotel's present system receives over the entire commercial or entertainment broadcast band. The new equipment perfected by the Western Electric Company will pick up the giant short-wave station used in world-wide broadcasting, such as those in London, Paris, Berlin, Moscow and Tokyo, as well as in Australia, South America and Africa.

According to the management, the Waldorf is the first hotel in the country to add short-wave broadcasts to its Radio service which is available in 2,000 private rooms.

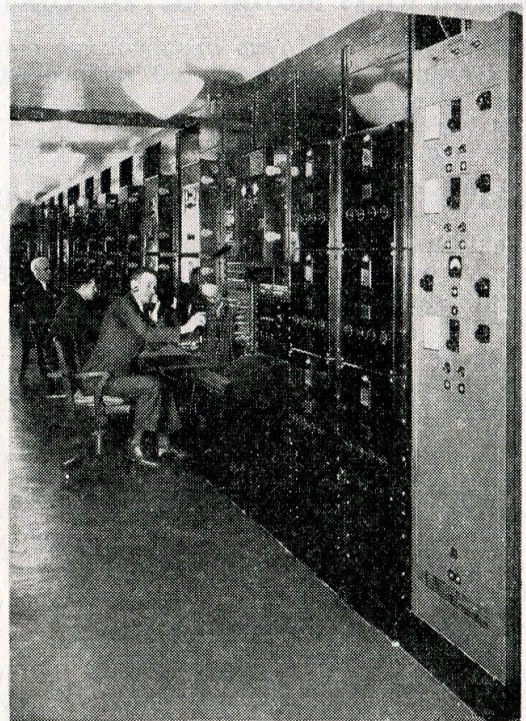
A unique antenna, designed by engineers of the Bell Telephone Laboratories to pick up short waves with minimum interference, is strung between the hotel's two lofty towers 660 feet above street level. Two strands of wire cross to form an immense "X," while a third resembles an inverted "U." The strands are of different lengths and each responds to waves of related lengths, thus spreading their tentacles over the whole short-wave area.

Being horizontal, the antenna largely escapes interference from short-waves which, originating nearby, present a vertical electrical front. It takes advantage of the fact that short waves coming around the globe from distant stations are twisted so that they are as intense hori-

zontally as vertically. The wires are strung broadside to those points on the globe where the majority of short-wave stations are located.

From the lead-in wire, the Radio impulse surges 600 feet down in a special transmission line to the Radio room on the sixth floor. A vacuum tube "beats" it down from high frequency to 385 kilocycles. Its energy is now amplified 100,000,000,000 times and a high fidelity detector tube translates this Radio frequency into audio frequencies, the electrical equivalent of sound. Amplified once more, these frequencies pass into the hotel's present 6-channel program system.

The receiving units are designed for particularly high selectivity. The signal intercepted by the antenna is repeatedly filtered through tuning coils, condensers and vacuum tubes until the voice of the desired station, thousands of miles away, issues pure and clear. Numerous refinements make possible the accurate tuning required in the short-wave realm where channels may be separated by as little as .1 per cent, as for instance at 20,000 kilocycles, where the next station is only 20 kilocycles away. There are various devices to overcome the natural caprices of short-wave reception at great distances.



Radio room of the Waldorf-Astoria with three Radio men on duty.



**NEW MEXICO RADIO
COLLECTORS CLUB**

New Mexico Radio Collectors Club

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FOR INFORMATION CHECK THE INTERNET
<http://www.newmexicoradiocollectorsclub.com/>



The New Mexico Radio Collectors Club is a non-profit organization founded in 1994 in order to enhance the enjoyment of collecting and preservation of radios for all its members.

NMRCC meets the second Sunday of the month at The Quelab at 680 Haines Ave NW, Albuquerque NM Tailgate sale at 1:00PM meetings start at 2:00 pm. Visitors Always Welcomed.

NMRCC NEWSLETTER

THIS PUBLICATION IS THE MONTHLY NEWSLETTER OF THE NEW MEXICO RADIO COLLECTORS CLUB. INPUT FROM ALL MEMBERS ARE SOLICITED AND WELCOME ON 20TH OF THE PRECEDING MONTH. RICHARD MAJESTIC PRO-TEMP NEWSLETTER EDITOR, SEND ALL SUBMISSIONS IN WORD FORMAT, PICTURES IN *.JPG FORMAT TO: RMAJESTIC@MSN.COM

USPS Stamp

CONTENT REQUESTS WENT UNHEEDED still no authors...

The New Mexico Radio Collectors Club Newsletter is your newsletter. I have had only a few content contributors over the seven years that I've been writing, editing and publishing the NMRCC newsletter. I can and I will continue to write articles for other publications and when I get around to it, I'll do a story for the NMRCC about old radios, radio collecting and the rewards of the collecting hobby.

As they say in radio and television business "Content is king"

- Under the most rigorously controlled conditions of pressure, temperature, volume, humidity, and other variables the organism will do as it damn well pleases.

