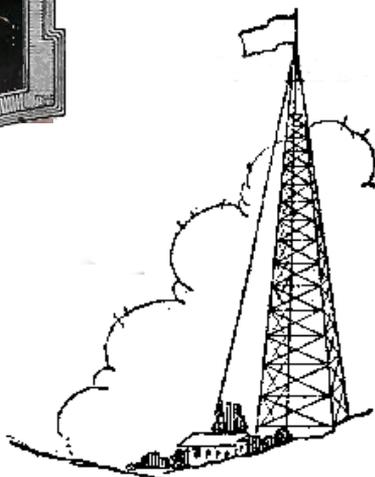


The Carolina Antenna



Fall 2006
Volume #12
Issue #3

Carolinas Chapter
of the
Antique Wireless
Association





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The newsletter of the
Carolinas Chapter of the
Antique Wireless Association

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VOLUME 3

THE PREZ SAYS ...



By Ron Lawrence, KC4YOY
CC-AWA President

This has been a busy past couple of months around our house. First I want to urge all of you to be very careful when you lift heavy items like old radios, especially Boatanchor transmitters and receivers. I was making plans to attend to the AWA annual conference in Rochester New York when my back flared up again. The doctor put me to bed for 3 days just 2 weeks before the AWA event. It wasn't until after those 3 days that she approved of me taking the long ride to NY, about 13 1/2 hours.

I had a great time at the AWA show, even if it was down by more than half what it was on my last visit in 1999. It's been seven years since I was there last because just 2 weeks after returning from the '99 trip I

was "downsized" out from a job I had held for more than 20 years. In the following 7 years I've worked for 4 different companies, most of them for less than a year. My current employer has worked out the best so far, I've been there almost 3 years which is long enough to earn enough vacation time to be able to make the trip again.

In 1999 I would guess that there were 200+ vendors and over 1,000 registered attendees. This year there were only about 95 vendors at it's peak on Thursday morning and when it started to rain that number went down fast. I heard that there were about 400 folks registered. Even though I never saw anywhere near that many folks there at one time. One of the really high points of the conference was the contest. This year's theme was Military radios, from pre-WW1 through current time. There were things there that you'll have a hard time ever seeing in one place again. A WW1 Submarine radio, more enigma code machines & supporting equipment than almost anywhere in the world, including a cold war Russian machine the even the NSA didn't have when it owner brought it into the country. And it was





Ron Lawrence and his 1st place display of Clough-Brengle transmitters at the national AWA show in Rochester New York

working on top of that.

I put together an entry of my two Clough-Brengle transmitters and a lot of Civilian Conservation Corp information for the Pre WW2 category. It won the blue ribbon by the way.

We had a great time, ate lots of really good food, Thursday evening we went to the AWA museum and the museum annex. If you've never visited either of these you're missing something great.

The auction on Saturday was about half or less what it used to be, there was some really neat items and a lot of items that never made their minimum.

With the conference being shortened by one day this year we found ourselves having to drive all the way home on Sunday, in past years we left after the luncheon on Saturday and spent the night in Harrisburg PA and then drove the rest of



the way home Sunday, breaking the trip almost in two. After the long drive Wednesday, then radioing our brains out for 3 days, it was a really long tiring drive home Sunday.

About 2 weeks after the trip to New York my back flared up again, this time it didn't get any better after some bed rest. The doc sent me to have an MRI which showed a badly ruptured disk at L5-S1 which is the same place it was in '85. She (the doc) sent me to a surgeon in mid Sept. He operated on me on Sept. 26. So far it's going fairly well, I went back for half days about weeks later.

I just did my first full day today Monday Oct. 16 after being out of work 5 weeks. I'm here to tell you it was a REALLY long day.

I'm planning to ride to the Jamestown meet this Saturday, I hope the muscle spasms have died down by then.

Plans are well underway for the

Charlotte show coming up in March. Most everything is going to be the same except that we've decided to drop the Thursday evening dinner. I know a number of you have told be just how much you enjoyed it, but we have to face facts that the meals at the hotels are just about to break us. They don't come close to paying for themselves. To be completely open about this I think it's only fair that you know just how much it costs for these meals. Here is a breakdown of each meal, how much we charge, how much they really cost and what the shortfall for each meal is, and what the actual cost per person is.

THURSDAY KICKOFF LUNCHEON
26 people @ \$15 each

Total cost \$476.17
 Amount collected \$390.00
 Shortfall **\$86.17**
 Actual cost per person \$18.31

THURSDAY EVENING DINNER
25 people @ \$25 each

Total cost..... \$851.71
 Amount collected.....\$625.00
 Shortfall **\$226.71**
 Actual cost per person..... \$34.07

FRIDAY EVENING BANQUET
43 people @ \$25 each

Total cost..... \$1634.30
 Amount collected..... \$1075.00
 Shortfall **\$559.30**
 Actual cost per person..... \$38.00

SATURDAY LUNCHEON
for 24 people @ \$15 each

Total cost.....\$471.05

Amount collected..... \$360.00
 Shortfall.....**\$115.05**
 Actual cost per person \$19.62

The plans right now are to keep the Thursday kickoff luncheon, the Friday Banquet and the Saturday Luncheon. Folks are just going to have to fend for themselves Thursday evening.

Brochures will go in the mail sometime in January, I hope. Stephen Brown is going to take over the job of handling pre-registration for 2007. His address will be published in the brochure.

Clare Owens is taking over the job of Treasurer from Robert Lozier, who has been club Treasurer as long as there's been a club, so this is a big change over.

I would really like to urge someone to come forward and start learning just what it takes to run this event. I don't know how many more years I'm going to be able to do it. I've been chairman for more than 15 years and directly involved with the event since 1979. Someone needs to start looking over my shoulder for a couple of years.

We usually have a Christmas party of some kind in mid December. I'll keep you posted as the exact date and location.

Happy collecting, and be careful lifting those heavy radios.

Ron Lawrence
KC4YOY



NOTES FROM MEETING OF THE EXECUTIVE COMMITTEE OF THE CC-AWA

The Executive Committee of the Carolinas Chapter of the AWA (CC-AWA) met on November 5, 2006 at the WBT studio building in Charlotte, North Carolina. The following directors and officers were present: R. L. Barnett, Robert Lozier, Ernie Hite, Ted Bryan, Stephen Brown and Clarence Owens.

The meeting was called to order at 2:20 PM by the Treasurer, Robert Lozier.

The minutes of the meeting of May 21, 2006 were read by Robert Lozier. A motion was made to accept the minutes as read by Clarence Owens; seconded by Ernie Hite; motion passed unanimous.

The reading of the minutes was punctuated by several discussions:

- Robert Lozier gave the treasurer's report. A copy of the club's finances is available to club members upon request.
- Our 2006 Conference net proceeds were less than \$1000.
- The total conference expenses were approximately \$8100 in 2006 and \$8700 in 2005.

Robert Lozier stated that we have always wanted to have enough in the bank to cover a complete "meltdown" of a conference. We would just barely be able to do that

with our current bank balance. It was brought up that we really should have enough money in hand to have a complete meltdown and still be able to hold a conference the next year.

- The idea of not refunding prepaid registration fees and flea market space fees was discussed. Several pros and cons were expressed. No motion was made.
- The reasons for having yearly club dues were discussed. Robert Lozier explained that he feels the dues do not imply any particular number of newsletters per year but rather are meant to support the existence of our corporation. Without the corporation we would be unable to contract for the services needed for the yearly conference or sponsor the Saturday flea markets without incurring personal liability.
- The membership for 2006 is down from 2005, probably because we did not send out membership renewal reminders this year.

NEW BUSINESS

In order to add Clarence Owens to the list of people authorized to sign checks on the club's account at Wachovia bank two things must happen:

1. There must be a new signature card signed by Clarence Owens in the presence of a Wachovia em-



ployee. This has been done. This signature card then must be signed by all other persons authorized to access the account. This is pending the recovery of Ron Lawrence.

2. Club meeting minutes showing that Clarence Owens has been elected Treasurer of the club must be published.

A motion was made by Ernie Hite and seconded by Ted Bryan to elect Clarence Owens as Treasurer, who will take office as soon as the bank authorizes him to sign checks on the club account; motion passed unanimously.

A motion was made by R. L. Barnett and seconded by Ernie Hite to accept Robert Lozier's resignation as Treasurer with great appreciation and regret. This will be effective when Clarence Owens' bank authorization is complete. The motion passed unanimously.

A motion was made by Ernie Hite and seconded by R.L. Barnett to authorize the following people to have signing authority on the club bank account:

- Ron Lawrence, President
- Clarence Owens, Treasurer and Secretary
- Stephen Brown, conference pre-registration chairperson
- Robert Lozier, conference auction chairperson

The motion passed unanimously.

A motion was made by Stephen Brown and seconded by Ted Bryan

to appoint Robert Lozier to the Board of Directors of the CC-AWA; motion passed unanimously .

The CC-AWA Executive Committee recognized the following:

- That Steven Smith has resigned from the Board of Directors.
- That there is one vacancy on the Board of Directors.

The email sent to Ron Lawrence from a person who read the wrong date for our Fall meet in the ARC magazine was discussed. No motion was made.

Notes:

- The club laptop known as CCAWA -2 was turned over to Clarence Owens for use in his role as treasurer.
- A supply of the club checks was given to Clarence Owens by Robert Lozier .
- The club account name stamp was given to Stephen Brown for use when processing checks.
- The club address for bank statements will be changed from Robert Lozier's to Clarence Owens' address.

With no other business before the Board, the meeting was adjourned at 4:00 PM.

Recorded by:

Clarence Owens

Secretary CC-AWA



ARMSTRONG SUPERREGENERATIVE

BROADCAST RECEIVER – CIRCA 1922/23

A RARE BIRD

By Robert Lozier

Why write about a dull homebrew like this? While millions of radio enthusiasts around the world built or purchased broadcast receivers using the regenerative circuit in one form or the other, virtually no one actually built broadcast receivers using Howard Armstrong's superregenerative receiver circuit that was disclosed to the public June 31st, 1922.



While it was indeed true that amplification of radio signals approaching one million could be obtained with only two tubes, the output signal contained artifacts from the blocking (quench) oscillator that precluded really good audio quality when operated at medium wave broadcast frequencies. Artifacts that would manifest in the form of a rushing sound in the background. Add to that, the fact that it was generally considered very difficult to set up and operate successfully and you had a circuit by a world famous inventor that did not excite the public interest for a long time.

The real value of the superregenerative circuit was not demonstrated until almost ten years later when there was a rapid increase in



practical communications operation at VHF frequencies (above 50 MHz.).

Think the superregenerative circuit should be dead by now? Not so.... It has found a niche in the designs for GigaHertz ultra, ultra low power receivers for battery powered data collection systems like gas and water meters.

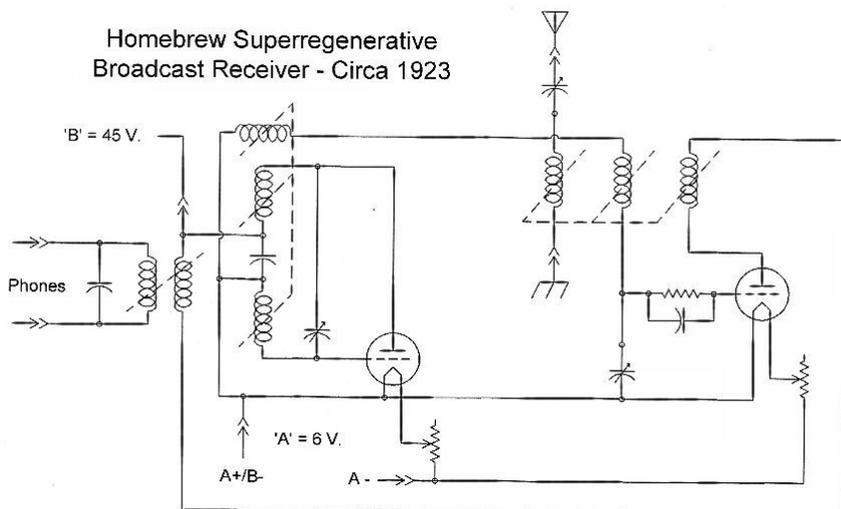
What about the little knife-switch on the front panel?

I can only speculate on this.... When Armstrong demonstrated this circuit, it was done with a loop antenna to show that the outfit would easily pick up the New York stations from inside a lecture hall. When this set was built, there was a three circuit coil mount that permitted the signal to be applied via a long wire. Maybe the intention was to be able to use a loop antenna at a later date with the option of a switch select. Another theory could be that since the panel has three peepholes, it could be that the experimenter salvaged the panel from an earlier project.

A note about preservation of this set....



Homebrew Superregenerative Broadcast Receiver - Circa 1923



I obtained this set back in the late 1970's when the Bill Orr collection was sold at auction. It was in good shape except for the front of the hard rubber panel. The surface was somewhat rough and it looked like someone had tried to protect the white filler in the knobs by giving them an over coat of shellac which spilled over onto the panel in places.... The general color was a very dull grayish brown due to natural oxidation aggravated by relatively high humidity even though the back side of the panel is pretty much a semi-gloss jet black.

I noted that it would be simple task to remove all the components from the panel. Doing that, I proceeded to remove the shellac with alcohol. That went very quickly. Next was to smear on a coat of Goop waterless hand cleaner and rub down with clean terry cloth. (Remember! Never use cleaners like 409, Super Clean, Purple Stuff, etc. when cleaning hard rubber or Bakelite. These caustic materials will dissolve/etch the

surface in a heartbeat!)

Then I applied another generous coat of Goop. This time I substituted the terry cloth with 0000 Grade steel wool and used very light pressure and circular motion all over the panel for 10 to 20 minutes. Every few minutes during the process I would wipe as much of the Goop off as possible and inspect the panel under strong light. I was looking to make sure that the coloration across the entire panel stayed as even as possible.

If I had continued this process long enough, I'd get back to a black panel rather than a somewhat grayish brown tinted black. I decided that it was better to keep some of the oxidation evident for educational purposes.

Should you know of another 20's vintage super-regen I'd sure like to exchange photos.



BOY, OH BOY, OH BOY!

I GOT MY OWN POCKET RADIO!

By Robert Lozier

Back in the late 1950's transistor pocket radios had been around for less than five years and good old USA brand pocket sets were selling for \$29 to \$49 dollars. Way too expensive for many kids of the day. I know that it was a big deal in my family when I got a Truetone tube type 'lunch box' portable about 1958 that sold for \$17.95. In 1958 the Japanese radio manufacturers started exporting cheap tube and transistor radios to the USA. They went head-to-head with the US manufacturers for the pocket set market. Paul Farmer observes that US manufacturers of the day were producing much better sounding lunch box portables but maybe that did not mean all that much to kids and young teens that were going crazy over Rock 'n Roll. One thing Japan did better than us at the time was to create a stylish product at a reduced price.



Another thing some importers did, that was new to the US market, was to introduce super low cost pocket radios with loudspeakers that would only pick up strong local AM radio stations. Almost all of these sets are identified on the back as "Boys Radio". Almost all of these radios



used basically the same two transistor reflex circuit with diode detector. In the reflex circuit, at least one of the transistors is connected so as to amplify the signal, first at the radio frequency and then again at the audio frequency.* A large percentage of people lived within 10 miles of at least one AM station and these little pocket sets could entertain a pre-teen or young teen just fine; at least for a little while.

There may be a hundred or more versions of these radios that retailed from less than \$10 to upwards of \$15. I have yet to see a definitive statement as to why all these radios are marked 'Boys Radio' on the back. One speculation is that this classification earned the product a designation as a toy subject to a minimal import tax or quota rather than to be classified as a 'real' radio. This at a time when US manufacturers were trying to get government to maintain barriers or at least quotas for radio imports from Japan.

The majority of the Boys Radios look like the typical 6 transistor Japan made sets on the market at the time. i.e. Bright gold tone perforated aluminum loudspeaker grill, thumb wheel controls and earphone jack. Most of these radios also include a screw-on telescoping antenna that offers only a marginal increase in volume. Kids soon found out that these sets would get a lot louder if the antenna was touched to the finger stop on a rotary dial

telephone or touched to a metal based table lamp.

Often these radios came with a cheap vinyl plastic case embossed to look like the leather cases included with the more expensive 6 transistor sets. Unfortunately the plasticizers in the vinyl will soften the surface of some of the plastic radio cases leaving a rough surface or ridges where any pressure was applied to the cabinet surface. Just be aware of this before you start to pay-out for a set that is still in its case. The safest way to remove these vinyl cases without destroying them is to cut 1' wide strips of an old office file folder and force it down the sides, front and back of the case to break any slight adhesions of the vinyl. Then remove the strips and push the radio up from the bottom of the case. Another typical problem with these sets is missing logos, dial scales or medallions. These were attached with rubber base cement that becomes extremely brittle over time. Don't count on being able to find replacements because they are usually the first thing to be lost.

A relatively small percentage of Boys Radios are to be found in other form factors.....

Every year the AWA has an auction as part of their annual conference. When this set came up for sale, I had dismissed it as one of the little 5 tube AC/DC 'Jap' sets like I remembered being next to the big National Cash Register at the J.C. Penney Co. department store where I had worked as a teenager. I remembered that the side of the white plastic cabinet was charred almost black



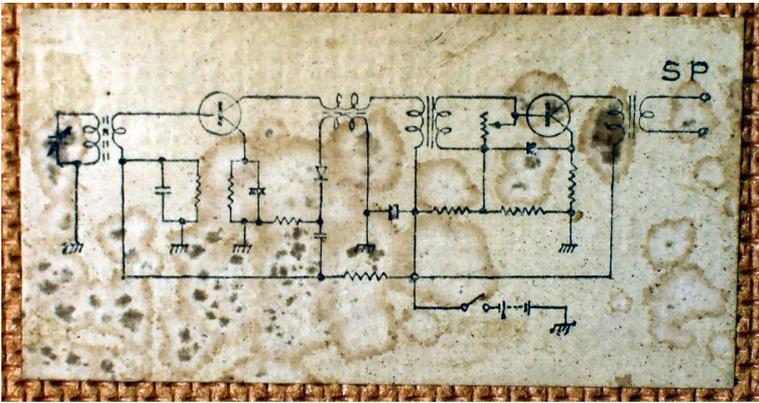
Coronet 2 Transistor table set

from the heat of the 50C5 output tube and wondered when it was going to catch on fire.... It never did....

When the auctioneer described the item saying that, to my surprise, it was a 2 transistor radio; I had to get in on the bidding. And I got it....

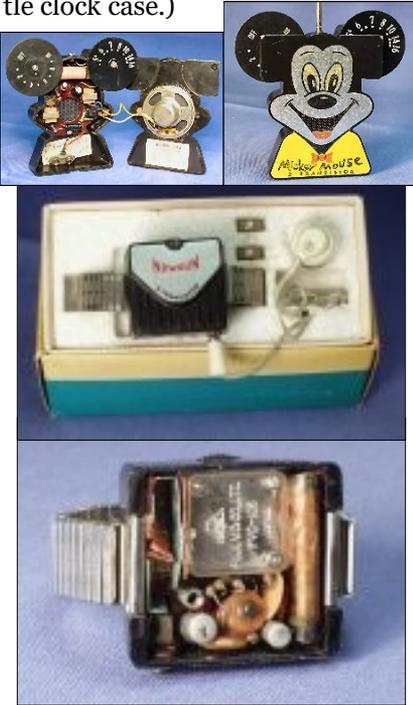
This is only the second two transistor table set I've seen. On inspection I can see that this is the exact same cabinet as used in one of those 5 tube, red hot, AC/DC sets. Even the volume control and loop stick antenna are basically the same. Right in the center of the fiber board back cover are those magic





Schematic for Coronet 2 Transistor table set

words 'Boys Radio' (The other table set I saw a few years ago is about the same size but in the form of a mantle clock case.)



Novelty 2 transistor radios:

These two transistor radios can also be found in novelty cabinets such as the Mickey Mouse head

and even bizarre form factors like a '38 semiautomatic handgun.

Not all of these Boys Radios had loudspeakers as can be seen in this Newsun wrist radio. It used two button sized hearing aid batteries that gave 20 hours of operation at best. The knock-off Twist-O-Flex watch band is a nice touch.

There are a few rare 1 transistor Boys Radios and, while not branded as a Boys Radio, be on the lookout for the, very rare, three transistor reflexed superhetrodyne radios.

By 1962 the price of 6 transistor pocket sets from Japan had dropped to the \$20 dollar range and it appears that the market for 2 transistor radios just faded away. I have not seen definitive numbers on how many of these sets were imported to the US but the number is surely in the millions. I'm thinking that 99+% of these sets have, long ago, gone to the landfill just in time for renewed interest in these simple childhood radios by the Baby Boom generation.

LISTENING TO THOSE OLD SPEAKERS AND HORNS

By Fred Crews

The old horn speakers and cone speakers made in the '20s usually had an impedance of 1000-2000 ohms which means they will not work well on later low impedance output devices which are in the order of 4-8 ohms impedance. There is a good way to make a simple impedance matching device that works extremely well.



1.76 ounce can of Altoids mints

Empty ALTOIDS boxes (the 1.76 ounce size) make an excellent container. Other similar boxes will work well, but the altoid boxes seem a natural. Other parts are 2 transistor radio output transformers Radio Shack part number 273-1380. Other suppliers transformers will work. They need to have an impedance of about 4-8 ohms on the one winding and about 1000 ohms on the other.

Other parts: 2 insulated miniature pin jacks used to connect to the speaker terminating pins, a 1/8 inch standard plug (miniature headphone plug) used in portable sound devices, a piece of shielded cable about 6 inches long (the shielded cable is used only for convenience- 2 single conductors

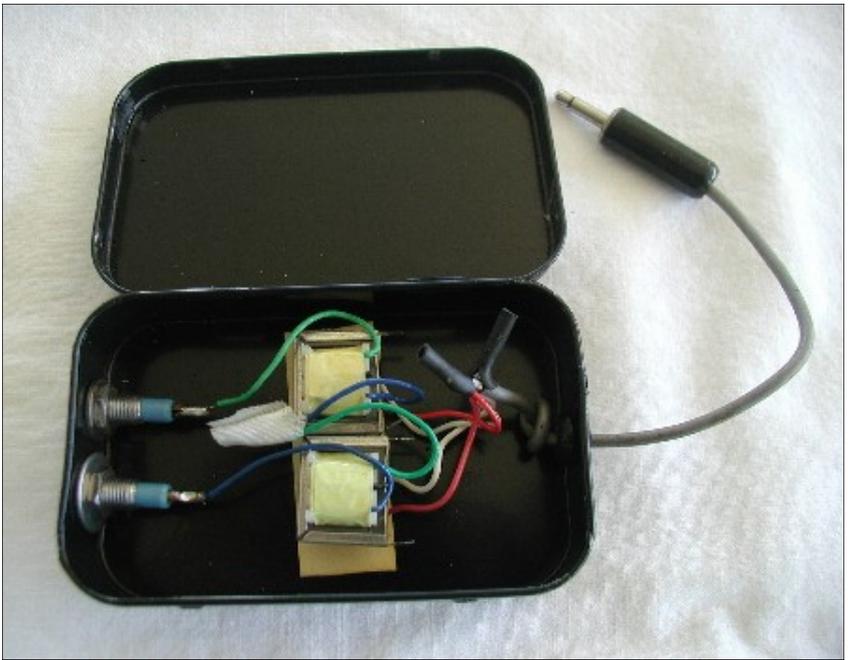
will work), and a grommet to fit the shielded cable through the box.

To minimize the laughter, paint the Altoids box some color- I usually use black paint. In one end of the box, drill 2 holes for the pin jacks- most require one fourth inch holes, but you may need to do a little reaming. I usually use the next smaller drill bit and a tapered reamer as the metal is very thin and subject to ragged edges. These will be the output connections to the speaker. Unfortunately, there was never a good standard for the exact hole size in these connectors, so you may have a bit of a problem with them, but you can do a little discriminate sizing and get them to work.

In the other end, drill a hole for the grommet and after installing it, feed the shielded cable through this end of the box.

We are using 2 transformers to get the output level and the impedances we need. The low impedance winding of the 2 transformers will be wired in parallel to the shielded cable. Match color codes such as red to red and white to white.

For the so-called output of our circuit, we need to connect the windings in series. Cut off the center tap wire. If this transformer has one, it is not used. Assuming the high impedance winding



wire colors to be blue and green (for example), connect the blue of one winding to the green of the other. This makes their signals adding. Connect the remaining blue and green wires from their respective windings to the pin jacks. The summary here is that the input windings are now in parallel resulting in roughly 4 ohms and the secondary windings are in series adding, giving about 2000 ohms impedance.

You can use Velcro or felt or something similar to keep the transformers from rattling around inside the box.

Now, how to use this box? If you plan to use cassette tapes or maybe CDs to listen to your speakers, there may already be an output jack on the device you can use. If not, I usually install one, using a jack that

disconnects the device's speaker when using this box. That means a little bit of wiring inside, but it isn't bad.

Another point is that you can mount a mini headphone jack instead of the shielded lead and plug and make up an adapter or so such as clip lead ends or the mini plug that just plug into the end of the box. So now, we have an impedance matching portable box that lets us listen to our speakers. One can even think of using such a thing to listen to the old 78 rpm and long play records.

One more point. Friends of mine from North Carolina have challenged me to build one of these units in the smallest of Altoids boxes, but they just aren't big enough. You can get some sound out if you only use one transformer, but it isn't very loud.

In The **Spotlight**

REGINALD A. FESSENDEN INVENTOR OF RADIO BROADCASTING



*Reginald Aubrey Fessenden
1866-1932*

Reginald Fessenden became radio's first voice in Christmas 1906 when he broadcast from a makeshift studio in Brant Rock, just outside Boston, a program of Christmas messages and spiritual music to ships at sea. The Christmas Eve program as recounted by Fessenden consisted of:

“... first a short speech by me saying what we were going to do, then some phonograph music.... Then came a violin solo by me ... which I sang one verse of, in addition to playing the violin, though the singing, of course, was not very good. Then came the Bible text, Glory to God in the highest and on earth peace to men of good will, and we finally wound up by wishing them a

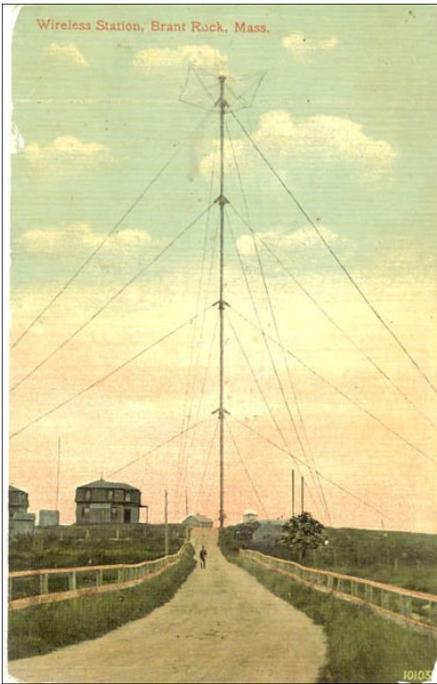
Merry Christmas and then saying that we proposed to broadcast again on New Year's Eve.”

As an inventor, Fessenden is credited with over 229 U.S. patents and over 500 world-wide patents; but the Canadian & British government support for the Marconi system (finally completed and first heard by the public in 1919) left him virtually unknown. He is credited with inventing a myriad of devices including radio, metal teabags, radar and complex measuring tools, and as an author of books on ancient civilizations.

Reginald Fessenden was a brilliant mathematician and excelled quickly in academics. Being enamored with the invention of the telephone by Alexander Graham Bell, Fessenden set out on a quest to develop communication without the restriction of wires - thusly “Wireless” as it was to be known later.

OTHER FESSENDENAN CREDITS

Fessenden is responsible for the invention of the Coherer, Electrolytic Detector, condensers, antennas, alternators, insulators and transformers that will operate radio transmissions far greater than



Postcard image, from around 1910, of the 128 meter (420 foot) tall Brant Rock radio tower.

Marconi equipment. Guglielmo Marconi and Fessenden would be in competition most of their lives but in many humble opinions Fessenden's gear was far superior as well as his science. Marconi believed radio waves traveled in a "Whiplash" method but Fessenden coined the phrase "Continuous Wave" and "Heterodyne" which are terms still used in modern day radio devices.

Fessenden worked with some of the greatest men in history such as Tesla, Edison, Westinghouse, Carnege, J. P. Morgan and the list goes on. Sadly the Canadian government ignored Fessenden's brilliance and he moved to



United States and abroad for a great part of his life to pursue his work but his roots always brought him back to Chippawa. He invented microfische, tracer bullets, depth sounding (sonar), paging, television, turbo electric drive for ships, and so much more. He was also the Chief Engineer for the Toronto Power House at the foot of Niagara Falls which was the largest Hydro undertaking on the globe back in 1903.

Fessenden's first test voice transmission took place on December 21, 1906. Called wireless telephony, Fessenden's antenna in Machrihanish, Scotland were destroyed by high winds and sea gales. He fought for his title to his inventions and by 1927, he was finally awarded a settlement for his patent claims for radio.



MSN GROUPS

<http://groups.msn.com/fessenden>

This web site is part of the MSN groups. Here you can find everything Fessenden. It contains historical photographs, and documents pertaining to the life of Reginald Fessenden. It also has a lot of information about the historic 1906 Christmas evening broadcast.

The web site also provides you with up-to-date information on "Let Distant Lands Converse", which will mark Fessenden's broadcasting centenary and will air on BBC RADIO 3 on Saturday December 23, 2006. *Let Distant Lands Converse* will attempt to recreate Fessenden's broadcast, which included a violin rendition of "O Holy Night" and a record playing Handel's "Largo".

American Radio Relay League

www.hello-radio.org/

In 1906 Reginald Fessenden was experimenting with voices over radio. There had been a report that he had been heard across the Atlantic, and his plan was to make a formal voice contact from Brant Rock, Massachusetts across the Atlantic to Machrihanish, Scotland. But a storm blew down the antenna at the Scottish site. Fessenden, in true ham spirit, went to "plan B." Instead of transmitting to Scotland, he used the Brant Rock station to transmit Christmas greetings to ships of the United Fruit Company. In 2006, hams will complete what Fessenden failed to do in 1906 and achieve Plan A with special event stations.

In the section "100 Years of Voice" you can learn more about that historic Christmas broadcast and the birth of amateur radio. This group is also planning two special commemorative broadcasts which can be heard on 2000 GMT on Dec 29 to 2000 GMT on Dec 30. To find out more out these broadcasts, please check out their web page.

MR. MURCHISON'S RADIO PARTY

BY ELLIS PARKER BUTLER

This story first appeared in the January 1923 issue of *Radio News*. Illustration by Frank R. Paul.



For two weeks after Mr. Murchison installed his radio receiving set he and his wife did nothing after dinner but sit in the parlor and listen to it. For one week they used ear-phones, but at the end of the week Mr. Murchison decided that it was a shame to have all the pleasures of WJZ, WOR and the other programs and not share them, and he bought a large horn-like arrangement by using which any number of persons could sit at the far side of the room and hear everything very well indeed. It was a great success.

This addition to Mr. Murchison's radio gave him full and happy evenings for one week, for he had become a true radio enthusiast and



his days were merely hours that he had to pass somehow until the time came to go home and enjoy radio. He bought the best radio magazines he could find, and twelve books on radio, and he read them all and learned a tremendous lot he had never even imagined about radio. Although he had paid quite a large sum of money -- for him -- for his ready-made set, he was so excited about radio that he set about building a set himself, and he nearly drove his wife crazy trying to explain what sounded to her like utter nonsense about why a high-power reverse action transforms the antenna generator into an edgewise inductance -- which means nothing at all.

By the end of the week Mr. Murchison was such an enthusiastic radio builder that he told Mrs. Murchison he was going to take his boughten set apart to see what was in it, and he even kept Teena -- the kitchen maid -- from her work while he told her about indoor antennae and variocouplers. It was clear to Mrs. Murchison that unless something was done to bring Mr. Murchison back to the sane pleasure of listening to the programs of the broadcasting stations he would soon be like Mr. Brownlee, who was so interested in building better and better amateur sets that he did nothing else and never completed one sufficiently to hear anything with it. Mr. Brownlee was indeed a radio enthusiast. He had become such an enthusiast that he could talk



nothing and think nothing but radio, and whenever he pulled his hand out of his pocket he shed

screwdrivers and crystals and wire and insulators by the quart.

It was for this reason that Mrs. Murchison conceived the idea of having a radio party and, to her joy, Mr. Murchison welcomed the idea with enthusiasm.

"Great!" he exclaimed. "I'd just like to show some of these back-numbers here in Westcote what radio really is! We'll have a dinner -- a swell dinner -- and after dinner we will go into the parlor and we'll show 'em! And as for class -- think of giving the first radio party in Westcote! It will make you, my dear; it will simply make you!"

"I thought of that, too," said Mrs. Murchison; "It should not, to say the least, hurt my social standing. I thought of inviting Mrs. Bimberry, dear."

Mrs. Bimberry was the social dictator of Westcote; she was the society queen. She was also large. Mrs. Bimberry had for years been reducing, banting, starving and dieting and she still grew larger and larger. She hated it and she hated everyone who referred to her size or looked as if she was thinking of it. Mrs. Murchison greatly desired the favor of Mrs. Bimberry's social smiles and in the depths of "her heart Mrs. Murchison had a wily little plan. One of the broadcasting stations was sending out "reduce to music" programs every evening, and Mrs. Murchison felt that if Mrs. Bimberry heard the "reduce to music" number over the radio and was pleased with the idea and bought a radio outfit and reduced herself to music because of

it, Mrs. Bimberry would feel everlastingly grateful to Mrs. Murchison and would be her friend forever.

The dinner part of Mrs. Murchison's radio party was a great success. Not only were Mr. and Mrs. Bimberry present, but also Mr. and Mrs. Claygull and Mr. and Mrs. Brownlee. At the last moment Mr. Murchison had insisted that Brownlee be asked, for Murchison was an extremely nervous little man and as the time for the party approached he became panic-stricken lest his radio set should not work. He wanted Brownlee on hand in case there was any hitch in the program. Brownlee could certainly find what was the matter with the radio outfit if it did not work properly. The dinner was excellent and all were very merry and talked nothing but radio, and after dinner Mrs. Murchison proudly led the way into the parlor and seated her guests in a semicircle after they had examined the radio outfit and exclaimed over it.

"Ah!" said Mr. Murchison, glancing at his watch when all were seated. "We are just in time. The program is just beginning. Now you will see how simple this wonderful invention is. You see here three dials. I turn one, and I turn the next, and I turn the third, and from many miles away comes the -- the -- the --"

He had turned the dials, but nothing happened.

"Perhaps Central has not given you the right connection," puffed Mrs. Bimberry, who had eaten too much - as usual -- and felt a trifle cross.

Mr. Brownlee, who with difficulty had made himself sit at all, now jumped up and went to the table.

"Let me tune her up, Murchison," he said. "I know all about this game. You see, folks, I turn this dial to light the amplifier, and this one to find the wavelength and this to -- to -- to --"

Nothing happened.

Mr. Brownlee and Mr. Murchison, quarreling in low tones pushed each other aside and turned dials this way and that way, but nothing at all happened.

"What in thunder did you do to this thing?" Brownlee demanded, and Mrs. Murchison tried to hide the annoyance she felt by asking Mrs. Bimberry in her sweetest voice, if the coal situation wasn't just too pitiful.

"Get a move on, Murchison; get a move on!" urged Mr. Bimberry. "I've got a date at the club if this thing isn't going to pan out."

"Oh! I'm sure it will" said Mrs. Murchison sweetly, and then, to Mr. Murchison: "Henry, dear, do you suppose it makes any difference if the wires you had stretched to the barn are gone?" "What!" cried Mr. Murchison. "My word, Mary! Do you mean to tell me --"

"Now, please, Henry," begged Mrs. Murchison. "There are guests present, please remember. Of course those wires are gone! I certainly did not know those wires were



necessary, did I? You distinctly told Teena -- I'm sure I heard you -- that the wires out there were no longer necessary. So when they fell down this afternoon I gave them to a little boy who asked for them."

"Well, of all the idiotic --" Mr. Murchison began, but Mr. Bimberry interrupted him.

"Well, Jane," he said to Mrs. Bimberry, "I guess we might as well be going; there doesn't seem to be any radio radiating here this evening. I told you --"

"Now, wait; please wait!" exclaimed Mr. Murchison distractedly. "Don't get mad, Bimberry. Don't blame me for this! I did happen to say that outdoor aerials were no longer necessary, but I did not mean they were not necessary for us. It's a nice state of things when a woman picks up your slightest word and gives your antenna to the first red headed boy that comes along --"

"He was not red headed!" exclaimed Mrs. Murchison. "And if you feel called upon to say mean things to me, Henry Murchison, you might wait until a time when --"

"Don't mind him, Mrs. Murchison," said Mrs. Bimberry, giving Mr. Murchison a cruel glance. "He's nothing but a man -- a mere man --"

"Oh! I am, am I?" cried Mr. Murchison, flaring up. "Well, I'll thank any woman that comes into my house --"



"Who are you calling a woman, Murchison?"

demanded Mr. Bimberry fiercely. "If you mean my wife I'll tell you we did not come here to be insulted! You enticed us here to hear what you call radio, but if you did it to insult my wife and me I'll mighty soon show you --"

Mr. Bimberry was actually doubling his fists and something horrible might have happened immediately if Mr. Brownlee had not drawn the attention of one and all by clapping his hands together.

"Please! One moment, folks!" he cried. "Please listen to me one moment!"

I know you are all disappointed because Mr. Murchison's radio does not work, but you forget that Brownlee is here! I know something about radio. I have studied it. It is my life's joy it was well that Mrs. Murchison invited me here tonight, because --"

"Because what?" asked the indignant Mrs. Bimberry grimly.

"Because," said Mr. Brownlee, "instead of the evening being a failure on account of Mr. Murchison's lost antenna, it may turn out to be an evening we will all remember all our lives. And why? Because, with your permission, we will make a most interesting experiment."

He paused to allow his words to have full effect, and then proceeded.

"Recently," he said, "things no one dreamed possible have been done with radio. One man, instead of using outside antenna wires, has



received with perfect results the radio concerts through his bed springs. Another man received them by using a common window screen. But, most marvelous of all, another man -- doing away with all antenna -- has received the concerts through his own body! Yes, it is indeed wonderful, Mrs. Bimberry, as your face shows me you think. And, with the kind permission of one and all, we will try that very thing. We will use Mrs. Murchison as the antenna and, if we have success, we will still hear the radio program tonight!"

Instantly everyone was excitedly interested and Mr. Brownlee flew from spot to spot, disconnecting a wire here and attaching it there, winding a wire around Mrs. Murchison's waist and running another from her ankle to the radiator for a ground connection. When all was ready Mr. Brownlee tuned in and, to the wonder of all present, a voice -- very faint and very indistinct -- muttered from the horn of the loud-speaker. Mr. Bimberry threw the first monkey-wrench into the amazed admiration of the listeners.

"But you can't hear it," he said. "I can't make out a blame word. I don't call that such-a-much. If that's the best you can do, Brownlee, I call the

whole business a fiz --"

Mr. Brownlee was working at the dials nervously, now turning one, now hastening to see that the ground wire was well connected with Mrs. Murchison's ankle. He was excited and flustered. He stopped and wiped his face, for it was hot work.

"One minute!" he cried. "We've got something; we've almost got it! All we need is -- Just let me think this out a moment! Ground wire -- feed wire -- induction -- voltage -- battery -- antenna. I have it! I know what's the matter!"

"What?" asked Mr. Bimberry. "What's wrong?"

"Mrs. Murchison," said Brownlee. "Mrs. Murchison is wrong. She's not -- not enough. There isn't enough of her. What we need is more of her. She doesn't gather enough wave. We need somebody big -- huge."

He looked at Mr. Bimberry, who was large, but his eye passed him and alighted with an eager glare on Mrs. Bimberry, who was far larger. In an instant he had connected her with the radio box. In another

instant he had detached the ground wire from Mrs. Murchison's ankle and had attached it to Mrs. Bimberry's.

"You!" he exclaimed joyfully. "Just what we need!"

"Sir!" exclaimed Mrs. Bimberry haughtily. She turned to her husband. "Joseph," she said, "we will go. I have been sufficiently insulted in this house! And as for you, Mary Murchison, if you think you can let your guests be outraged in this manner the less we see of each other the better! Good night!"

At that moment Mr. Brownlee must have touched a dial or a wire, for the mumbling whisper from the horn suddenly came forth loud and clear in the introductory words of the "Reduce to Music" selection. Clear and strong, as if aimed directly at Mrs. Bimberry came these words:

"No one, except for reasons of laziness or gluttony has any excuse to be fat!"

For a moment Mrs. Bimberry's face went purple; her vast bosom heaved with anger. She cast a murdering glance at poor Mrs. Murchison and started toward the door.

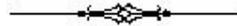
But only started toward the door. At the first stride the ground wire became taut. For a moment the queen of Westcote society stood on one leg, her arms stretched out before her and one leg extended backward toward the top of the radiator to which she was wired, like a high art nature dancer, hopping

on one leg.

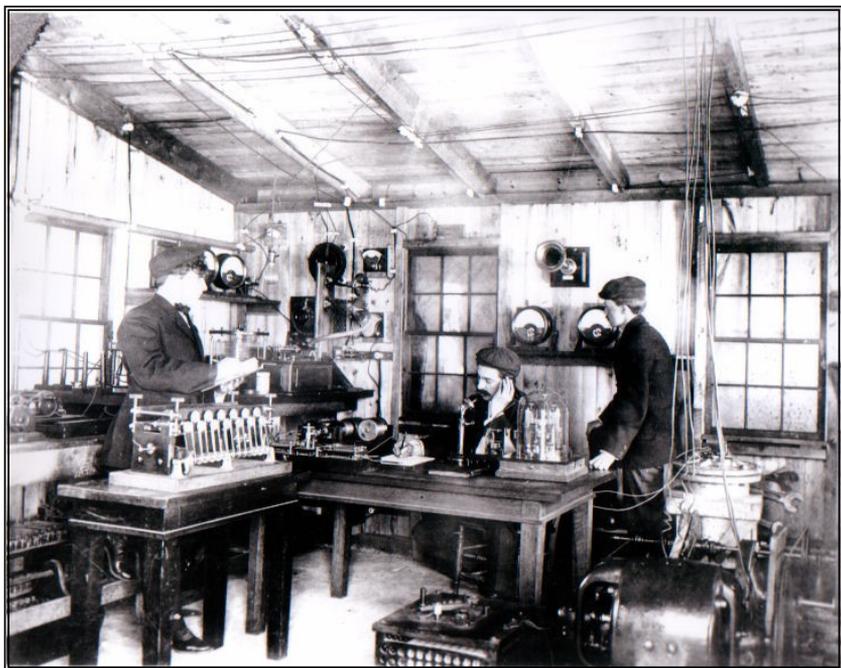
"Ready! Begin!" cried the voice from the radio horn: "Hop! Hop! Hop! Down!"

Mrs. Bimberry hop -- hop -- hopped and at the word of command "Down!" she sat down on the floor so suddenly that all her hairpins fell out and a tall glass vase of chrysanthemums fell off the table, but she did not have to follow the next command. It was "Raise your right foot!" and Mrs. Bimberry did not have to raise her right foot; it was already high in the air, pointing to the top of the radiator. It was her ground connection but it had no connection with the ground.

And still, relentlessly, through Mrs. Bimberry and out of the horn, came to her ears valuable advice on how to reduce. Radio is indeed wonderful! But that was not what Mrs. Bimberry was saying just then.



Ellis Parker Butler, American humorist and author, wrote and published 2,200 stories, books, essays and poems during a career that spanned more than forty years. Mr. Butler was -- by any measure and by many times -- the most published author of the pulp fiction era.



Above: Picture: transmitter room at Brant Rock Mass. –circa 1906
Below: Fessenden staff at Brant Rock. Reginald Fessenden is sitted with his son Ken behind him holding the cat Mickums.

Note: both photos were obtained from the NC State Archives

