

The Jersey Broadcaster

NEWSLETTER OF THE NEW JERSEY ANTIQUE RADIO CLUB

May 2012

Volume 18 Issue 5



**MEETING/
ACTIVITY
NOTES**

Reported by
Marv Beeferman

The ON-LINE Broadcaster

The New Jersey Broadcaster is now on-line. To date, over 120 of your fellow NJARC members have subscribed, saving the club a significant amount of money and work for your editor. Interested? To subscribe, send your e-mail address to mbeeferman@verizon.net. Be sure to include your full name.

For starters, let's re-emphasize that for two reasons, the next NJARC meeting will be moved to May 4th in Princeton. First, it will allow members to attend the Kutztown swapmeet on the following Friday and second to allow setup for the InfoAge Vintage Computer Festival on the 5th and 6th.

At the April meeting, the club was treated to a presentation by John Dilks that Dave Sica said "rose to nearly a History Channel level of quality" and Ray Chase called "superb." Unfortunately, a prior commitment did not allow me to experience John and his grandson in full "theatrical garb," but I was able to catch John's disclosure of the true hero of the Titanic rescue at the Old Barney Amateur Radio Club meeting a week before. For more details, see Ray's article "A Titanic Celebration" in this month's *Broadcaster*. You can also check out the presentation at the following link: <http://www.upstream.tv/recorded/21821440/highlight/256659>.

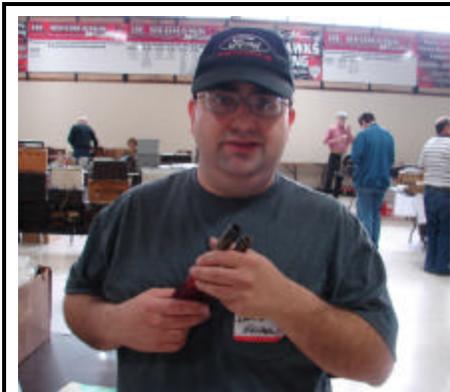
Our Spring swapmeet, with president Richard Lee at the helm, went very smoothly. Phil Vourtsis was nice enough to again provide transportation and I filled his van with some very nice buys includ-



MEETING NOTICE (Date Change)

The next NJARC meeting will take place on Friday, May 4th at 7:30 PM at Princeton's Bowen Hall (70 Prospect Ave.). Directions may be found at the club's website (<http://www.njarc.org>). Clean up some of those old (or new) radio relics and curiosities that have been gathering dust and show them the light of day at our Show & Tell scheduled for this month. Add a little story and perhaps a few laughs and share them with your fellow NJARC members.

ing a GE "Electronic Tubes" advertising sign/clock, a Clapp-Eastham RADAK type C-3 receiver and an Orthocone speaker.



NJARC member Darren Hoffman came up with this great find at our Spring swapmeet. These homemade tools are used to tighten/loosen the nuts holding potentiometers to their chassis. See page 8 for more photos.

On March 29th, the club received some additional advertising on Paul Buresh's "Tube Talk Classic Radio Show" out of Boston. Paul interviewed members Al Klase and Dave Snellman regarding our recent DX contest and their winning logs. The show runs every Friday at 11:00 PM on WRCA, 1330 AM and can be heard on the internet at the following address: www.1330wrca.com/streamer/.

In this month's *Broadcaster*, you'll find an article by Al Klase describing the Tactical Military Communications Display at InfoAge which Al was instrumental in setting up. Al is always looking for

donations or long-term loans to expand the display and is presently on the prowl for a WWII tank transmitter. He would like a BC-604, BC-684 or BC-294. These are 20-28 or 27-39 MHz FM transmitters and are part of the SCR-508/608/808 radio systems used in tanks. He does have a BC-604 but this request is for a separate display. It would be especially nice if the transmitter had a set of crystals. If you can help, please contact Al Klase at ark@ar88.net. (You really weren't going to put your set on the air, were you?)

Thanks to membership secretary Marsha Simkin for doing a great job in collecting dues this year and keeping our membership database up-to-date. Unfortunately, we had two resignations and will have to drop 15 members who have not been heard from. Fortunately, we usually get back a few of these when they finally realize they are "actually" not receiving the *Broadcaster*. With our usual gain of about 10 members each year, your club remains as strong as ever!

Upcoming Events:

- 5/5-6: InfoAge Vintage Computer Festival
- 5/11-12: Kutztown radio meet; Rennigers, Kutztown PA
- 6/8: Monthly meeting, Princeton; "Electric Phonographs"
- 6/16: InfoAge Military Technology Museum Antique/Classic & Historical Car Show, 10:00 am to 4:00 pm

THE JERSEY BROADCASTER is the newsletter of the New Jersey Antique Radio Club (NJARC) which is dedicated to preserving the history and enhancing the knowledge of radio and related disciplines. Dues are \$20 per year and meetings are held the second Friday of each month. The Editor or NJARC is not liable for any other use of the contents of this publication.

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A DUMONT TV... ALIVE & PLAYING AGAIN AT INFOAGE

By
Ray Chase

A couple of years ago, NJARC member Joe Benvotato and I had the opportunity to acquire a 1950 model RA 110 DuMont 19 inch console TV from northern New Jersey. Its former home was in a storage module that family members were trying to clean out. The price was right (free) so we muscled it out and into my van; not a small feat as the set is large and heavy. Of course, the family members remembered that it was working when they stored it quite a few years ago!

The RA 110 was a high end set in 1950; the cabinet was in nice condition and had doors that, when closed, made it look like an ordinary piece of furniture. This set used a "Mallory Inductuner" that tuned continuously through the VHF TV channels, the FM band and even could pick up the VHF aircraft band. It looked like a nice addition to the Radio Technology Museum (RTM) at InfoAge so that is where we put it. (It turned out especially nice since we recently mounted the bronze cornerstone plaque from the old DuMont factory that was located in Patterson, NJ).



We tried turning the TV on but, not unsurprisingly, it had a weak scrambled picture, so I tried to recruit a volunteer

to try to fix it up. The late Nick Senker took a crack at it several times, replaced some caps and managed to improve its performance a little but declined to take the big step and replace all the caps. It was also difficult to work on since it was designed with a metal picture tube attached to the cabinet and a separate HV power supply. Nick must have taken the chassis in and out a half a dozen times, but he always left it completely put together after a day's work on it.

After Nick passed on, the DuMont languished, full of potential but not going anywhere. Finally, along comes Al Klase who said he knows nothing about fixing TV's but decided that it is never going to get well until each and every suspect cap is replaced. Al moved a work table, bench light and appropriate tools to the museum TV area, pulled the chassis and went to work. Progress was hampered by not having an exact schematic; the closest he could find was one for the 103D/104A/110A models that were slightly different. Al also constructed a plywood prop to support the chassis upside down on the work table.



After replacing what was thought to be all the caps, the chassis was put back into the cabinet but there were still issues with a fuzzy and decidedly non-linear horizontal sweep. Tubes were checked and a few replaced, but out came the chassis again.

The focus circuit was kind of strange and used a 25 watt, 1000 ohm rheostat that turned out to have an open right at the end. Worst of all, it had a longer than normal shaft. Where would we find one of those?

We put out a call for junker chassis contributions and found two. In the meantime, member Harry Klancer was working at home to salvage one good table model TV from two TV's labeled Crosley but that clearly had DuMont chassis of the same vintage. Surprise! every one of these sets also had open focus

rheostats. A call was put out to our TV contacts on the net and word came back; check the schematic. The entire 300 volt B+ load for the set is routed through the wiper of the focus control; therefore, any faults on the main B+ line (can you imagine an electrolytic cap shorting after 50 years?) stresses this component. I cannot imagine what kind of a half-baked engineer designed that circuit!

Contacts from the net also identified a reasonable source for replacement parts, albeit not with extended shafts. Al found some shaft extensions in his junk box and I found one of these rheostats in my junk box but with a normal shaft length.

OK - chassis back in its cabinet but still problems. Back on the bench, closer inspections found a semi hidden bias supply with more caps and VOILA! An open 10-watt resistor was discovered which meant no or reduced bias. (As an aside, this set has more rectifier tubes than you can literally "shake a stick at.")

As things started to make sense, past-president Phil Vourtsis joined the team and removed the "Inductuner," cleaned it and checked for any other hidden culprits. Other resources were tapped to find an operating pattern generator to adjust the sweeps.

Back in the cabinet, things were looking better but some "fold over" still existed in the horizontal sweep. By now, we had a gaggle of technical advisors staring at the picture offering their comments and suggestions. One of our older and recent new members, Jules, remembered these sets and suggested that we check the damper tube.

but I'm sure that some of the dead bodies were lost over time. Also changed were many tubes, a resistor and of course the focus rheostat. There's still a little clean-up to do before buttoning everything up, but the set has now been running off and on for about 15 hours and it's holding nicely.



Thanks to all who contributed and especially to Al Klase who dug in and did most of the work and who still says he knows nothing about TV's. Now on to the other TV's in the area that need some of the same TLC - any volunteers?

Planning was coordinated and we came up with an integrated concept for the display. Channel 12 came by on the preceding Wednesday while we were setting up and taped much of the display.

Just as our ideas were coming to fruition, some of us were delighted to witness a superb Titanic presentation at the club's Friday evening meeting presented by NJARC member John Dilks and his grandson, John Dilks 5th. It was a marvelous, multi-media Power Point show that John had spent a year in preparing and the results were a testimony to his labors. John and his grandson were even dressed appropriately; John as a tycoon in full tuxedo and tails and his grandson as a radio operator (an actual 1939 Merchant Marine uniform with the hat badge switched to a Marconi badge).



Although John noted that there were many heroes during the rescue, he believes that the one man responsible for all the lives that were saved was the Marconi radio operator aboard the RMS Carpathia who received virtually no credit for his efforts. John also talked about the role of station AX, located at the end of the Million Dollar Pier in Atlantic City, as part of the rescue transmissions.

Great job John, and hopefully we'll be able to post the presentation on our web site for those who missed it.

At InfoAge, the first step we took was to hang our circa 1914 oil portrait of Marconi in a prominent place in the hotel lobby. This grand portrait was donated by Alex Magoun when the Sarnoff Library closed and we have been waiting for an excuse to uncrate it and put it on display. The main display was located in one half of the lounge room of the hotel.

NJARC member Al Klase created a code oscillator in a period speaker case



We needed to search to find out where the damper tube was located, whether on the main chassis or in the HV cage. Once found and replaced, and after some tweaking using a pattern generator, BINGO! - a nice picture.

I tallied up that 48 caps were replaced,

A "TITANIC" CELEBRATION

By
Ray Chase



A month or so ago, InfoAge decided to arrange a special Titanic exhibit on April 15th, the 100th anniversary of the Titanic disaster. It would be held during our normal Sunday operating hours and was advertised locally as a special event. InfoAge groups were asked to contribute what they could to make this happen.

connected to a replica Sarnoff key, also donated by Alex. This is a crafted replica of the key that David Sarnoff used in the Wanamaker's wireless station where he received signals from the steamship Carpathia giving the Titanic survivor lists. The original key is in the Smithsonian. Al adjusted the telegraph tone to be as close to what was believed to be the signal from Titanic.

NJARC member Jerry Simkin loaned a group of posters and other related Titanic documents that Steve Rosenfeld brought up last Wednesday. Bob Pilcher (who is distantly related to the Englishman who conducted the British hearings on the disaster) loaned an original copy of the proceedings that was dated May 1914. Bob Perricelli and John Cervini of the AOC put together other related display documentation and Frank O'Brien of the Apollo computer display presented newly discovered information on a rare temperature inversion that had a probable distorting effect on long distance visual images that momentous night.

Several models of the Titanic were displayed including a model of what the remains of the ship presently looks like on the ocean floor. In another room, the QCWA group had set up a display that simulated Morse's first telegraph transmission from Baltimore to Washington that actually transmitted the code message, "What Hath God Wrought". In addition, there was a graphic simulation of Marconi's first trans-Atlantic wireless communication and a model train that automatically ran on tracks along the simulated telegraph line. (Morse's first telegraph line demonstration was laid along a railroad line). InfoAge director Fred Carl set up a short slide show in this room so visitors on Sunday would first see an introduction to the facility.

How did all this work out? Excellent! We had well over 50 visitors and lots of traffic through our radio technology museum (RTM). Al Klase was in the Titanic exhibit all afternoon; in the museum were: Harry Klancer, Dave Snellman, Henry Kearney, Phil Vourtsis, Marsha Simkin and Edith Chase. I moved back and forth between the hotel and RTM as needed. Counting the other groups, there must have been about 20 volunteers present. We developed some new contacts; most visitors were very interested and of course the weather was excellent. All in all, a very successful day.

RADIO TECHNOLOGY MUSEUM TO OPEN THREE DAYS A WEEK

By
Ray Chase

Beginning Wednesday, May 2nd, the club's Radio Technology Museum (RTM) will be expanding our operating hours to Wednesday, Saturday and Sunday from 1 to 5 PM.

Since NJARC first set up our radio museum in Marconi Cottage #2, we have been a leader in making InfoAge a meaningful history/science attraction in the area. We soon expanded to several rooms in the hotel and then moved to our present larger quarters in the "L" building. A couple of years ago, we expanded our Sunday hours until 5 PM, but we and InfoAge seem to have reached somewhat of a plateau even though our Sunday afternoon traffic has increased this year.

If we are to continue to grow and attain the stature of an established museum and learning center, then we must provide more public access time. In looking around at our peer museums such as the Radio & Television Museum in Bowie, MD and the smaller Chatham Marconi Maritime Center museum in MA, we see that they are open more days than InfoAge and all with strictly volunteer participation. Therefore, the radio museum group decided to promote a goal of having InfoAge open for three days a week.

Actually, an increasing group of us are present at the museum most of the day on Wednesdays anyway so we really only had to add Saturday coverage. We pushed the other groups to do likewise and although they may not be able to provide full staffing with expert guides, we hope to have them at least open and viewable. An added benefit that comes with this new schedule is the ability to be listed in AAA tour guide books, a benefit that has helped other museums to grow.

So, we invite you to join others who are currently participating as docents and have fun extolling the wonders of radio and the history of this important site. A docent guide book is available on-line at the club website (<http://www.njarc.org>) and training is provided by seasoned tour guides. The more participants that we

have the less time each individual is called upon to fulfill our operating schedule.

Recently, several individuals who had no prior radio collecting or specific radio technical knowledge have joined us and have become accomplished docents as well as club members, so the interest in the museum and InfoAge is infectious.

By the way, InfoAge has recently submitted an application to the National Park Service to be raised to National Landmark status. This is a big step, and if approved, really puts us in the "big league". The application document is well done and tells a compelling story of the history of the site. Please take a look at it on the home page of infoage.org.

WHO WAS THE REAL HERO OF PENSACOLA?

By
Marv Beeferman

In June 1904, the American De Forest Company was awarded a contract by the U.S. Navy to build five radiotelegraph stations between Pensacola and Key West, Florida; Guantanamo Bay, Cuba; San Juan, Puerto Rico and the Panama Canal Zone. Although the overall goal of continuous communication turned out to be too ambitious, the de Forest installations were reasonably successful. Working with de Forest on this project was his chief assistant from 1904 to 1909, Frank E. Butler. Butler might be best known for being on the receiving end of de Forest's July 18, 1907 broadcast of the first ship-to-shore radio message - from the steam yacht Thelma to Fox's Dock pavilion in Ohio.

In 1924 and 1925, a three article series by Butler appeared in *Radio Broadcast* magazine, covering American DeForest's activities from the 1904 Saint Louis Exposition through the 1906 completion of a U.S. Navy station in Guantanamo, Cuba: "Making Wireless History With De Forest," "Pioneering With De Forest in Florida" and "How Wireless Came to Cuba." De Forest initially had high praise for Butler's story in a sidebar that appeared in the second installment of the series:

"Mr. Butler is in fact the only surviving

member of the 'old guard' who is still interested in wireless and who is in a position to lay before the public, in a graphic and interesting manner, a gripping story of those old days and the subsequent development of radio under the de Forest banner. He has just read me the first three installments of a most graphic story of his early days in wireless, recalling a thousand interesting facts which I had forgotten, and in which every radio fan must be intensely interested."

However, in a letter dated November 17, 1953 to wireless historian and collector Ed Raser found in the InfoAge archives, de Forest seemed to have second thoughts, particularly relating to the activities associated with the establishment of Pensacola station PN at the Warrington Navy Yard. Butler described his work in his article "Pioneering with De Forest in Florida." As de Forest wrote to Raser:

"Thank you very much for sending me the January 1926 'Radio Broadcast.' (Note 1) I have read the Butler article therein with greatest interest, but notwithstanding my approval of the first three installments of his story, I don't believe that I could have approved the story in this number because it is full of glaring misstatements."

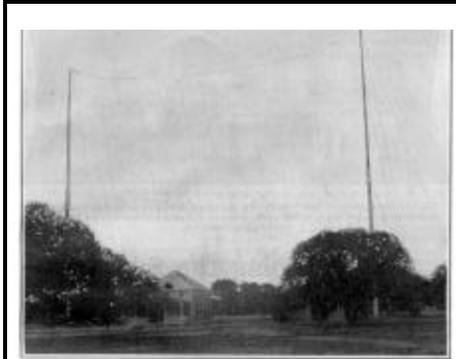
What actually caused de Forest to have such a change of heart from his original 1925 endorsement and who actually had the story straight? Let's look at the details.

Butler's Story

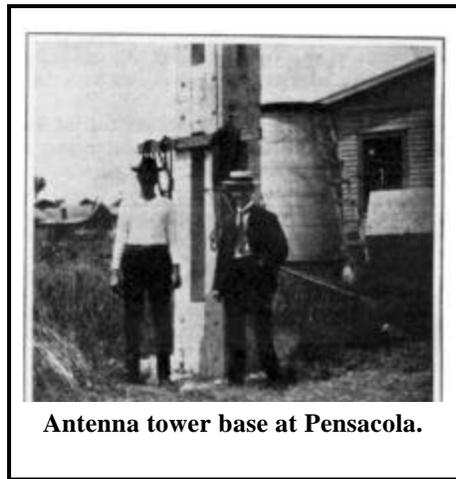
Butler relates that he was put in charge of building the Pensacola station with Navy assistance. He described the experience as "a battle from the very start" plagued by "fierce relentless static such as was never heard before with the crude tuning devices at hand." (Indeed, one of the major discoveries of de Forest's work was intense tropic static, especially in the summertime.) He also noted being baffled by poor ground conditions that "taxed to the utmost our perseverance and ingenuity in the effort to conquer them."

The station had a capacity of 10 KW with a two-masted fan antenna. The ground system was made of 100 square feet of heavy sheet copper buried five feet underground (with two feet under water) and connected to the spark gap by a four-

inch copper bus bar. With de Forest located at Key West some 400 miles away and the battleship *Brooklyn* anchored in the harbor about two miles away, the initial tests (which lasted a few weeks) were a dismal failure with transmissions not even being monitored on the *Brooklyn*.



Station PN



Antenna tower base at Pensacola.

Considering the possibility of a poor ground, Butler said that he increased its depth to eleven feet. The following morning, Butler received a telegram from de Forest..."Heard nothing." Butler then goes on to describe how a drink of water brought about the idea that solved the Pensacola problem.

One day, Butler relates that he was discussing the high quality of the station's drinking water with a Navy officer. The officer told him that he had personally supervised drilling the well and that it was 50 feet deep:

"If I had stopped at 45 feet or gone down to 60 feet, I would have had nothing but salt water...This white sand around these parts is about 45 feet deep, and below that is a stratum of clay and stone 20 feet thick, and beyond that is an indefinite

reach of sand."

Butler then said he considered the idea that perhaps the white silica sand, with a depth that was greater than the thin film of seawater that seeped around it, offered too much resistance or formed a dielectric that prevented a good ground. What settled it for him was based on his discussion with a local Western Union operator who told him that the only thing they found would work for their telegraph was an iron pipe driven down no more than forty feet.

The following day, Butler writes that he engaged men to drive 12 iron pipes, forty-five feet long, into the loose, moist sand. These were grouped in a small circle about two feet apart, the tops were joined together with heavy copper cable and a large bus bar was run into the spark-gap. Butler began sending again the evening after work was finished and "scarcely before I could realize it, the joyful news was received from Dr. De Forest that he had heard the first signals we sent out." Butler goes on to say that, from this time on, station PN worked perfectly and it was not long before it was heard by distant Northern stations.

De Forest's Story

Let's let de Forest speak for himself in his letter to Ed Raser:

"Pensacola was **unable to reach Key West for a great many months after Butler left there and went to Guantanamo, Cuba** (boldface by author). He was succeeded by another old and more reliable operator, Harry Mack Horton. He, it was who dug the big pit for the large copper-ground plate and who found that even that did not solve the problem. He, it was who had the iron pipes driven deep into the sand and clay; all to no avail."

"I had to go down there myself in the middle of summer - isolate myself in the Navy Yard against the yellow fever which was rampant at that time in Pensacola - there I labored for some six weeks, making every possible change in the antenna and transmitting equipment, reducing very greatly the damping of the spark gap circuit so that the receiving station would have a better chance for selectivity and against tropical static."

"I finally succeeded in establishing communication between Pensacola and

Key West. (We never had any difficulty in operating in the other direction.)"

"Butler made a very fine story out of what happened - only he became sadly confused regarding just who was responsible for the ultimate success. Butler was a loyal friend of mine and I must forgive him for diverting so far from the facts in order to write an interesting story."

What are the Real Facts?

Perhaps the one person most suited to settle the above controversy is Harry Mack Horton, but it appears that he did not document his work in Pensacola. However, a significant amount of information regarding Horton's work with de Forest is provided in the de Forest self-written autobiography "Father of Radio." In it, de Forest specifically notes that it was Horton who added a "huge copper plate" to the ground system and later installed the 12 iron pipes described by Butler. "But to Horton's dismay, and contrary to all the laws of wireless and geology, 'KW' (Key West) was still deaf to 'PN' (Pensacola). Discouraged and baffled, Horton wrote me all the details, and returned to Key West - just in time to escape being quarantined in Pensacola." "Finally it was decided that 'the Doc' alone could correctly diagnose the strange ailment at the 'PN.'"

So what finally brought a voice to station PN? According to Forest, it was a matter of finding the best frequency/spark gap length combination to overcome overwhelming tropic static. "We simply and doggedly tried every degree of coupling for each separate wave length, and varied the spark gap and transformer primary inductance for every individual setting of antenna inductance and capacity, keeping systematic records of each as we progressed. Not yet had the Audion Amplifier been conceived." "At last on Sept. 3, 1905, the triumph came: Key West, for the first time, had heard Pensacola."

So how could have Butler been so confused about events that occurred only some twenty years earlier and de Forest be so specific fifty years later? Although de Forest might, at times, be accused of exaggerating the facts surrounding his life and career, he was a prolific writer. He kept a daily journal and wrote thousands of business and personal letters. One can only speculate that some sort of documentation peaked the memory of de Forest

and the events of 1905. Much of this correspondence is housed at the Perham Foundation Electronics History Museum and perhaps here is where the final story may be found.

What also must be considered is the fact that many of the popular radio magazines of the time, including *Radio Broadcast*, were not known for their accuracy, especially when it came to "first-hand" accounts. Publishers were in no position to fact check or question the material that was submitted and many times articles were written to document a certain agenda rather than actual events.

Whatever the case, the de Forest letter only scratches the surface of the exciting material at InfoAge that yet has to be unveiled from Ed Raser's files.

Notes:

(1) This appears to be a typographical error. The events that de Forest comments on are actually found in the 1925 issue of *Radio Broadcast*.

References:

1. Frank E. Butler, "Pioneering With DeForest in Florida," *Radio Broadcast*, January 1925, pgs. 492-497
2. Lee de Forest, "Father of Radio," Wilcox & Follett Co., 1950
3. Mike Adams, "Lee de Forest - King of Radio, Television and Film," Copernicus Books, 2012
4. Letter from Lee de Forest to Ed G. Raser, November 17, 1953, InfoAge archives.

ment?

"You know, I always liked the Burma-Shave signs. And if we can, they'd be good for putting out on Marconi Road in front of the museum too. We can also make versions of it to display at the various tech shows and library programs that we do."

"OK. Then make a Burma-Shave sign."

For those of you who are too young to have seen them, or who have forgotten, five or so small red signs were spaced along the side of a highway and told a tale or delivered a driving safety lesson - in rhyme - and ended with a sign for Burma-Shave shaving cream. They were usually on two lane highways because they were always fun to read, but you couldn't read them while traveling at high speed. From the 1920's through the 1950's, this form of advertising was very successful but, when Interstate highways came along, the company was bought out in 1963 and the signs were removed - nearly 50 years ago. Here's an example:

Henry the Eighth
Sure had trouble
Short term wives
Long term stubble
Burma-Shave

When we tried to create some similar signs for advertising the Radio Technology Museum, one thing became clear; most of us who work in the museum are not poets. But neither were the Burma-Shave corporate folks, so they used to run annual contests to allow the public to create new rhymes for their signs. And as we announced at the last NJARC meeting, that's why we are appealing to you, the membership. We need creative folks to help us design Radio Technology Museum signs. So far we have about 6 entrants who have sent in 35 entries, but we need more!

Rules are simple. As in the example above, create a short 4 or 6line rhyme that might entice people to visit our museum, and that most people could understand while they're driving by at 40 mph. The last sign, "Radio Technology Museum", does not have to rhyme with the rest of the message.

After we receive enough entries, Ray Chase and two other judges will select a winner and a runner-up, and prizes will be awarded. We'll make the signs, and your handiwork will be displayed for all to

CONTEST ANYONE?

By
Harry Klancer & Marv Beeferman

It started fairly simply. "Have you seen the Quarter Century Wireless group's display?", Ray Chase asked. "You should. They've got spaces for the other InfoAge museums, like us, to advertise". What to do?

We at NJARC and the Radio Technology Museum like to think of ourselves as preserving little bits of history. But how to create an historic-looking advertise-

see – and presumably will attract additional visitors to NJARC’s Radio Technology Museum.

Another contest that the club is considering is based on a lecture given at last year's AWA conference and an article in the January 2012 issue of "Antique Radio Classified." The theme of the contest may be summarized as "extreme restoration" and originated some nine years ago with the Quebec Antique Radio Collectors Society (SQCRA).

The rules of the contest are simple: contestants have one year to restore a basket case (and we do mean "basket case!") radio. Photographs are taken before the restoration starts and during all major steps of the process. (These will help judges better understand the challenges the contestant faced in order to finish the project.) One year later, the results are presented to a panel of judges.

Sound interesting? Your comments and suggestions may be discussed on the Reflector or sent directly to president Richard Lee at radiatorich@prodigy.net.



The process that resulted in this beautiful restoration was described by an SQCRA member at last year's AWA conference. The radio started out virtually in pieces.

WWII TACTICAL COMMUNICATIONS DISPLAY

By
Al Klase

One of the recent additions to the Radio Technology Museum at InfoAge is the Tactical Military Communications Display just up the hall in section 98032C, across from the computer museum. The display may be subtitled "communicating with an Army on the move."

Tactical radio communications came of age in WWII with systems such as walkie-talkies and handi-talkies, being deployed down to the squad level. Other notable developments included effective long-rang, man-transportable radio stations and modern FM vehicular radiotelephones.

Wire-line communications, field telephones and teleprinters (a.k.a. Teletype), were also extremely important because they supported a large volume of traffic and were relatively safe from enemy intercept. Radio-relay systems were introduced, incorporating multiplex telephony and telegraphy, to extend the wire system. These could be deployed much more rapidly than traditional long-distance wire trunk circuits.

The Squad Radio display includes the original "Walkie-Talkie" the BC-322/SCR-195, and the original Motorola "Handie-Talkie." It would be nice to complete the family with a BC-1000/SCR-300 FM "Walkie Talkie." If you know where one is available, please speak up.



The man-transportable display consists of an AN/GRC-9 HF transmitter-receiver deployed with a GN-58 hand crank generator. I don't believe the "Angry-9" made it in time for WWII. For historical accuracy, what we need is the similar-in-appearance BC-1306/SCR-694.



VHF-FM mobile radios came of age in this era through the hard work of Fort Monmouth, the Link Corporation, Motorola and AT&T. We are fortunate to have a nearly complete SCR-508 as used in the Sherman tank and an SCR-509 Jeep radio on loan from another museum. Again, there are things we could use to round out the display including a mounting rack for the tank set and power supply to go under the jeep radio. A proper tankers helmet, with the built-in headphones would be icing on the cake.

Front-line wire communications are illustrated by a pair of working EE-8 field phones (The Radar O'Rielly autograph model) connected to a BD-72 switchboard.



Other featured items include an AN/TRC-8 radio-relay system, a Hallicrafters BC-669 HF transmitter-receiver, and a working Model 19 teletype connected to a PC, allowing us to print AP News and such from the Internet.



So come on down, and take a look. We are considering providing a Power Point presentation on the club web site; we'll let you know as soon as it becomes available. If you have comments or additional items for the display, contact Al Klase at ark@ar88.net or 908-782-4829.

SPRING SWAPMEET



You never know what will show up at an NJARC swapmeet. This 1939 World's Fair bottle was featured on the popular cable TV show "American Pickers" and had a sticker price of \$20.

