



WARCI News

Wisconsin Antique Radio Club, Inc.

Summer (in case you hadn't noticed)

July 2012



Wells Manufacturing Company, a Wisconsin Pioneer By Greg Hunolt - see Page 6



Figure 1 - Wells Alkire R. F. 6 Receiver, 1922



Figure 2- Wells building in Fond du Lac, Wisconsin

NEXT WARCI MEET:	
	Sunday, July 22; 8:00 - 12:00 Noon, Outdoor (unless it rains): Doors open 7:00AM
	The Terminal, 5917 S. Howell Ave., Milwaukee (near the Airport)
	Features: 50-50 Raffle, Donation Auction, Excellent Free Pizza

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WARCI, Inc.

THE WISCONSIN ANTIQUE RADIO CLUB, INC. EXISTS TO PRESERVE THE KNOWLEDGE OF RADIO, TELEVISION, AND OTHER RELATED DISCIPLINES. WE HAVE A SPECIAL INTEREST IN THE HISTORY OF RADIO IN WISCONSIN, WISCONSIN RADIO COMPANIES, RADIO STATIONS, ETC. OUR MEMBERS' INTERESTS INCLUDE RADIO, TELEVISION, AUDIO, AND ANTIQUE PHONOGRAPHS.

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WARCI Information

WARCI is incorporated in the State of Wisconsin.

Annual membership dues are \$15 for each calendar year, January - December. (Allowance is now made for new members joining in July or September.)

Seller's fee at Swap Meets is \$7.00 for members, \$10 for non-members.

Swap Meets are held at The Terminal, 5917 S. Howell Avenue, Milwaukee WI (near airport).

The next swap meet date is Sunday, July 22. Swap meet times are 8:00AM - 12:00 Noon. Doors open at 7:00AM for set-up.

WARCI News

This newsletter is the official publication of the Wisconsin Antique Radio Club, Inc. It is published four times per year, in January, May, July and September. The WARCI News is free to all paid-up club members.

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Articles or material for the newsletter are most welcome and should be sent to Greg Hunolt, ghunolt@excel.net or N5412 State Hwy 57, Plymouth WI 53073. Include your name, address, phone, and email. PC format (e.g. MS Word) by email is preferred. JPEG for images is preferred. Please contact Greg Hunolt for assistance.

Classified ads up to ¼ page are free to WARCI members

The cut-off date for all newsletter material is about the fifteenth of the month preceding publication of the next newsletter (e.g. August 15, 2012, for the September, 2012 issue).

WARCI Website

www.warci.org

The WARCI website features information about WARCI activities, Wisconsin radio, articles, etc. Contributions are most welcome! Contact our webmaster Nick Tillich, at webmaster@warci.org. Thank you, Nick, for your great work.

Voluntary Member Directory

There is a new feature on the website that lets you create a listing for yourself in a club member list. You can describe your interests in radio, etc., and provide contact information. This capability put in place by NARC has provided some good contacts for WARCI members who are also NARC members and have listed themselves on the NARC site. We encourage you to list yourself on our site - it is purely voluntary.

WARCI Headlines

May 6 Meet

Even though it was not Mothers' Day, and even though the new sign (thanks Dennis) was in full view, we had a less than spectacular turnout at the meet. There were 13 sellers. Two new members joined the club. The 50-50 Raffle netted \$50 for the club. The Donation Auction was quite good, bringing in \$103 for the club, and WARCI thanks those who donated and purchased. Once again, we enjoyed the excellent pizza cooked and served by Joe Halser and his staff. Due to a camera mishap, we did not get photos from the meet.

Membership Update

Last year, 2011, we had 44 active, paid members. We have added ten new members this year, and with renewals we stand at 53 paid members and a total of 61 active members - so we have 8 members who have yet to renew for 2012! We need for those eight to pay their dues - *this means you!*

WARCI Public Relations Coordinator

WARCI's new volunteer Public Relations Coordinator is James Michaels. He comes to the club with previous experience in Public Affairs in the Wisconsin Air National Guard. He has an endless fascination for antique radios stemming from his single digit years with his dad, James Sr.

While growing up in the Midwest, James was exposed to radio broadcasting as his dad was a radio personality, and in later years served as station manager. James Sr. would play Old Time Radio shows during a specific segment, and James Jr. and his sister would listen at home with their mom. When life eventually took them to Western Wisconsin, they purchased a home built in 1906, and became only the second family to own it after the son of the original owner and builder. Left behind in the home were many treasures, a handful of them being antique radios. From there, James' collection grew; some tinkering here, some collecting there. When college came and his parents sold his childhood home, James sold the majority of his small collection. But now, at the age of 32, James and his wife, Bethany, attend flea markets, auctions, and visit any antique store they can find. James is always on the search for a radio he has yet to learn about, and

Bethany finds inspiration in vintage designs and decor.

James intends to spread the word about the Wisconsin Antique Radio Club, Inc's mission, all the while educating the general public about a part of America's past we must never let die.

An early task will be the development of a PR plan for WARCI that lists the PR activities that we now do (and who has been volunteering to do them) and ideas for the future, and where we will need volunteers to carry the plan forward. We will discuss the plan at an upcoming meet to see which new ideas the membership wants to see action on and to see if we can get volunteers.

WARCI on Facebook

Thanks to James, WARCI now has an official Facebook page. Along with our fantastic website, warci.org, our new Facebook page is our social media outlet on getting the word out about our club! Interesting news articles, photos, announcements, and stories about member's radios, and interesting conversations abound. Check us out at the following link and make sure you 'Like' our page:

<http://www.facebook.com/pages/Wisconsin-Antique-Radio-Club-Inc/333900503344505>

If you're not on Facebook and would like to be, it's easy to join. Just follow the prompts.

September Meet - Auction Plan

We are planning to have the second WARCI auction at the September 23 meet. We need to discuss plans for the auction at the July meet. One thing we did last year for our first auction that was very well received was to advertise in the WARCI News radios and other items that would be up for auction. The advertised items were actually there, establishing credibility for our club. We should do that again - and we need to make sure items committed are there or we will lose that credibility very quickly.

Meeting Dates for 2012

Our remaining meeting dates for 2012 will be on Sunday mornings: July 22 and September 23 at our usual excellent location, the Terminal on Howell Avenue near the Airport.

A Tube Precept - General Notes on Tubes and their Marketing

By Ludwell Sibley

The following is reprinted from the June, 2012 edition of the Tube Collector, the publication of the Tube Collectors Association, with the kind permission of the editor and author Lud Sibley, who we all know as one of the foremost experts on tubes and their history, and the author of "Tube Lore", an essential reference for tube collectors or radio collectors.

Nowadays, random people send emails from Webspaces asking for help (read: advice on "value") on estates and other accumulations of tubes, mostly receiving types.

The following, while not jaw-droppingly profound, has been handy in providing them basic background. It may be useful to keep it around to deal with these random inquiries.

Nature of the Beast

Receiving tubes fall into four general classes:

- **Rare and precious collectibles.** This includes such treasures as De Forest spherical audions, AudioTrons, Welsh peanut tubes, etc. These have no practical use but are sought for their historic and display value.

- **High-profile "audio" tubes.** These are particular types (audio power tubes, pre-amplifier types, etc.) that are in vogue with tube-audio enthusiasts. Western Electric audio tubes like the 300B and rectifiers like their 274A are prized and can be thousand-dollar-plus items on eBay. More mundane non-WE items like KT88s or 7591s are in good demand.

- **Honest repair parts.** These are non-glamorous items from the '20s through the '70s, needed for repairing radios and communications gear.

- **Dumpster bait.** This class covers (mainly) color-TV parts of the '60s-'70s that are of little interest for other uses. They are still seen in great oversupply. This includes all Compactrons (12-pin types) except three or four six-volt types, a lot of Novars (big 9-pin types), damper tubes, high-voltage rectifiers and regulators, and the like. As a major exception, six-volt Compactron and Novar color-TV "sweep" tubes like the 6MJ6 are needed for many audio amplifiers and amateur transmitters.

Condition, Condition, Condition

The desirability / salability of a tube naturally depends on its condition. "Condition" varies widely, in decreasing order:

- New, factory-sealed in the carton (Western Electric audio tubes are the finest example).

- New, clean, in the box, with the brand on the tube matching that on the carton.

- New, in a plain white box.

- Used "pull," with a still-mirror-like "getter flash" on the inside of the bulb.

- Used, with a getter turning white (indicating the presence of gas inside), or with glass chips rattling around inside (not fatal operation-wise but harmful to value), or in the "wrong" box.

Salability also depends on whether the tube has been tested for operation (measuring emission or transconductance), checked simply for continuity of the heater / filament, or not tested at all.

TV-technician "tube caddies" often come up with an assortment of boxed tubes. Cases have been seen where the tech put a used tube in the box that had held its replacement. This is unhelpful value-wise. By contrast, a caddy with a high population of new sweep tubes would be of great interest.

A "Branding Play"

Buyers are wary of brand names on tubes. Brands like RCA, GE, Sylvania, Tung-Sol, Mullard or National Union are still recognized. Tubes marked with the private brand of a setmaker (e.g. Arvin, Crosley, Du Mont, etc.), although made by the big tube makers to the same quality standards, lack prestige. The brands Video and Micro "used or factory seconds" are hopeless.



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Editor's Note:

The WARCI News is your newsletter.

Your comments and suggestions for the newsletter are most welcome.

Your contributions of articles or other material are urgently needed. Your help is needed to make the WARCI News a success and to ensure that it covers the full scope of the interests of WARCI members.

If you're not seeing articles on topics you are interested in, write one.

You may submit complete articles, but information from which an article can be developed is also welcome.

Don't agonize over format, etc., as I will have to adapt your submission to the newsletter anyhow. Simple text is best. PC format (e.g. MS Word, separate jpegs by email) is preferred, but hardcopy text and photos are accepted.

In this issue we feature an article on another Wisconsin radio company, Wells of Fond du Lac, and a companion piece taken from a 1922 Fond du Lac newspaper on radio and the farmer. We begin with a "Tube Precept", a concise but cogent and useful set of notes by expert Ludwell Sibley, reprinted with his kind permission from the Tube Collector newsletter Lud edits.

We also introduce new WARCI member James Michaels who has volunteered to coordinate public relations efforts for WARCI.

We will also cover tube audio and television and other member interests - but we need your contributions of articles or information for articles.

The big event coming up in August is ARCI's Radiofest 2012, which WARCI is once again very happy to contribute to. This should be a great meet again this year; see information on Radiofest on pages 15 and 17.

On page 16 you'll see the ad for the Chicagoland Antique Radio Show, August 11 and 12, 2012, at the Lake County Fairgrounds, Grayslake IL. See the note beside the ad for more information.

Thank you, and see you at the July meet,

- Greg Hunolt, Editor, WARCI News

WARCI Welcomes!

WARCI welcomes new members, *thank you!*

Dennis Blaha, Wonder Lake IL

David Nash, Cedar Grove, WI

We hope you enjoy being WARCI members!

Bob Paquette's Microphone Museum



WARCI member Bob Paquette's Microphone Museum features his collection of well over 1,000 different makes and models of microphones as well as related pieces of equipment. The emphasis is on historically important microphones made between 1876 and 1950, and early radios, telephones, and many other communications devices, including an assortment of military gear.

You can see more photos and find out more about Bob's book "History and Evolution of the Microphone" at his website, <http://www.sssmilwaukee.com/Microphone%20Museum.html>

There is a very nice 8 minute video taken at Bob's Museum on You-Tube. You can find it easily by googling on "tube tests 23" or the link: <http://www.youtube.com/watch?v=1MzBQqiHUX0>

Bob always enjoys visitors and will be happy to give a guided tour to individuals or groups. You can call Bob at Select Sound (414) 645-1672 to arrange for your visit. Just ask for Bob Senior. The museum is located on the second floor of Select Sound, 107 E. National Avenue in Milwaukee. Enjoy your visit and allow yourself plenty of time.

Wells Manufacturing Company, Fond du Lac, WI

BY GREG HUNOLT

This article is the next in our continuing series on Wisconsin radio companies.

The Wells Manufacturing Company of Fond du Lac, Wisconsin, manufactured radios for a brief period in the mid-1920's. This article will provide some background on the Wells company, discuss its radio products, and note very briefly where it is today.

Background on Wells

An internal Wells document notes that "The birth of the Wells Manufacturing Corporation dates back to the year 1903 when it began to manufacture the Duplex Vibrator-type automotive ignition coil. At this time the total employment was six people." Wells began in 1903 as the Duplex Coil Company, a small machine shop operated by Edward J. Huber, and then was incorporated in 1912 by engineer Robert C. Wells of Fond du Lac as the R. C. Wells Manufacturing Corporation. The company first produced the duplex vibrator coil for automotive ignition systems and added other automotive electrical components, including ignition coils for the Ford Model T. By 1917, Robert C. Wells had left the company, but it carried on under the Wells name. In 1918 Wells moved to a building at the corner of Brooke and 2nd Streets in Fond du Lac, and in 1919 it legally became the Wells Manufacturing Company. Figure 2, page 1, is a photo of the Wells building, circa the late 1940's judging from the automobiles.

The years after World War I saw the now famous "radio boom" as broadcasting stations multiplied, folks were scrambling to build radios from kits or from scratch, and growing number of manufactured radio sets were brought to market. Visionary individuals (think Atwater Kent, Powell Crosley) pushed their companies – or started up new companies – to jump into the booming radio market. At Wells, the visionary seems to have been Edward W. Silverthorne, company vice president and sales manager, who in early 1922 returned from the east coast having hired an engineer from Westinghouse to develop a radio line for Wells. The March 6, 1922 edition of the Fond du Lac *Daily Commonwealth* newspaper (see the headline on page 1) reported that the Wells Manufacturing Company installed a \$20,000 plant to manufacture radio sets that will

"cover the U.S.". The paper noted that "Fond du Lac is to be among the first of the cities, if not the first in the northwest, to manufacture radiophones." The report quotes Silverthorne: "We have been preparing for this venture for some time. Now it has ceased to be a venture. During my trip east, and while in Chicago during the last two weeks, I found on investigation that the demand has so far exceeded the supply of radiophone sets that the electrical firms find it impossible to keep up. ... Our engineer, W. D. Alkire, formerly with the Westinghouse Electric, has planned all of our equipment, and within a short time we will be turning out radiophones at a medium price that will be capable of receiving broadcasts from all parts of the United States. ... As soon as we get operating it will mean more employees. I believe, too, that this industry has a growing future. The demand has only begun and the radiophone is in its infancy. There will be rapid evolution, which means much replacement as the wonders of this new aerial device are more and more developed." The article concluded by stating that the Wells Manufacturing Company will manufacture complete sets and all parts.

Over the years 1922 through at least 1926 (and possibly as late as 1931) Wells produced at least 14 radios / pieces of radio equipment. Wells was listed in the McGraw-Hill Trade Directory in November 1924, August 1925, and November 1926. Wells sets were listed in the June 1924 and June 1925 Radio Industry Encyclopedia of Radio Receiving Sets, the 1925 and 1926 Radio Retailing Receiving Set Specifications, and the March, 1925 Radio News Radio Set Directory (see below). Wells sets were also listed in the Set Catalog included in the 1933 John F. Rider Complete Trouble Shooter's Manual.

Wells radios are described below in three parts; first the 1922 Alkire line, followed by the 1923 Arlington set, and then the 1924 – 1926 "Model 24" group of sets.

Wells - continued on Page 7



Figure 2 - Wells Alkire Brochure (cover and back) 1922

Wells Alkire Radios

A Wells brochure from 1922 (see figure 2 above) describes the line of “ALKIRE” radio apparatus offered by Wells – a line bearing the name of the chief engineer, W. D. Alkire. The Alkire line included the following:

1. Model R. F. 6 Receiving Set (6 tubes):

“This is a scientifically constructed, long distance, Receiving Set, which employs an entirely new principle in Receiving, due to its Radio Frequency amplification. It enables you to tune an incoming station very strong and at the same time eliminate many interferences from surrounding stations. Has two stages of Radio Frequency and three of Audio Frequency. The ideal set for lodges, banks, Radio Clubs, etc.”

2. Model R.F. 4 Receiving Set (5 tubes):

“Is the same as our model R. F. 6 except that it has one stage of Radio Frequency and two stages of Audio Frequency, and therefore does not bring in the signals quite as loud as the R. F. 6 set. An ideal equipment for the home.”

3. Model R. S. 2 Receiving Set (4 tubes):

“This is the most complete, popular receiving set of the non-regenerative type produced. It is a fine outfit for residence, office, school, or summer home. Under favorable conditions, stations at comparatively long distance can be heard. It is so designed that a child can easily tune in, because of its great selectivity. Has Detector and two stages of Audio Frequency amplification.”

4. Model R. S. 1 Receiving Set (2 tubes):

“This set is of the same type as our model R. S. 2, but has only one stage of Audio Frequency amplification. The ideal set for father to purchase for his son who wishes to learn Radio from the ground up.”

5. Model D-2 Amplifier and T. R. Tuner (3 tubes):

“This combination set was developed to supply the demand for a medium priced, efficient, receiving set. With this set you can hear all the broadcasting stations within 1,000 miles. D-2 has detector and two stages of Audio Frequency amplification. All necessary wires furnished for T. R. tuner.”

6. Model T-R Tuner and D-1 Amplifier (2 tubes):

Wells - continued from Page 7

"The tuner used in this combination set is the same as used without D-2 amplifier. The [D-1] amplifier has one stage of amplification."

In addition to the sets listed above, the brochure notes that Wells also offered a complete line of Alkire parts.

The brochure announced that the Wells Alkire line was distributed in Fond du Lac county by the Radio Equipment Company, Dodge Brothers Agency, of Fond du Lac. Note the radio-equipped automobile shown in figure 2, apparently used to demonstrate and create interest in the Wells Alkire sets.

There is no information available about the number of these sets that were manufactured and sold, or if indeed all of the models listed in the brochure were ever produced.

Wells advertised the R. F. 6 Alkire Receiving Set in the December, 1922, issue of Wireless Age / Experimenters' World (see figure 3 below).

Figure 3 - Wells ad, Wireless Age, December 1922.



Figure 4 - Alkire R. F. 6, courtesy of Stewart Oliver



Figure 5 - Stewart's Alkire R. F. 6, top view

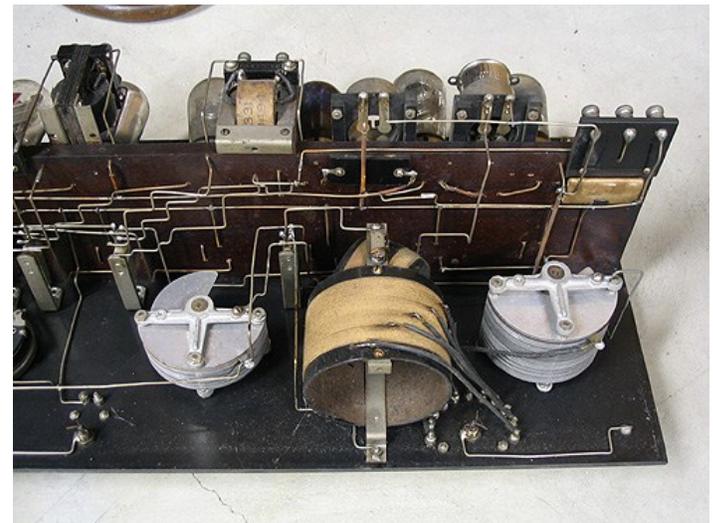
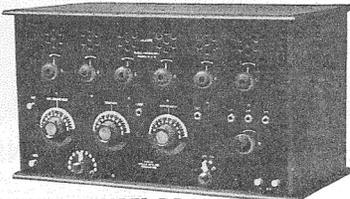


Figure 6 - Stewart's Alkire R. F. 6, chassis

ALKIRE
Radio Frequency Receiving Set

Super Sensitive



The Best for Appearance and Performance.

MODEL R.F. 6

Reduces static and interference
Easy to operate, no trouble with body capacity.

Mounted in handsome, highly polished mahogany cabinet with genuine bakelite panel.
All moulded parts are of genuine bakelite.

All sets are thoroughly tested for reception before shipped from factory and guaranteed with the Wells Iron Clad Guarantee.

JOBBERS: Good territory still open. Write for proposition.
The demand for Radio Frequency is tremendously assured.

Write for latest bulletin and proposition. Department R

WELLS MFG. COMPANY **FOND DU LAC, WIS.**

The ad notes that the set "reduces static and interference, easy to operate, no trouble with body capacity", and "the demand for Radio Frequency is tremendously assured".

Figures 4, 5 and 6 are photos of an Alkire R. F. 6 receiver owned by Stewart Oliver, reproduced here with thanks to him. Note the tuning condensers and coil under the chassis.

Wells - continued on Page 9



Figure 7 - Wells Arlington, courtesy of Wells Vehicle Electronics



Figure 8 - Wells Arlington, top view, courtesy of Wells Vehicle Electronics

Wells Arlington Radio

The next Wells product we have examples of is the Wells Arlington receiver, shown in figures 7 and 8 above. This set is on display in the office of the current president of Wells Vehicle Electronics. The Arlington is a four tube set, with one non-regenerative RF stage and two transformer coupled AF stages.

The Arlington was advertised in the November 22, 1923 edition of the Fond du Lac Daily Commonwealth, in an ad placed by the T. W. Meiklejohn Co., of Fond du Lac, distributor for the Wells Manufacturing Co. The ad described the Arlington as: "The Arlington is of the radio frequency type employing one stage of radio frequency, detector, and two stages of audio frequency amplification. Is complete in every detail. Can be

successfully operated with either dry cell or a storage battery. Is remarkable for its long range, fineness of tuning, simplicity of operation, freedom from interference, and the volume of reception. Is put up in a handsome walnut finished cabinet that will be an ornament to the finest home."

This was the only ad for the Arlington receiver that I have found so far, by a search through the daily newspaper for mid-November 1923 thru early January 1924 - the Arlington was apparently not heavily advertised in its home city. My guess is that the name "Arlington" refers to the very powerful station NAA operated by the U.S. Navy in Arlington, Virginia, at the time, which broadcast clock time reference data used businesses such as banks and jewelry stores (selling clocks and watches).

Photos of Wells Arlington receivers appeared in *Antique Radio Classified* in January, 1989, and October 2000. I have also corresponded with two owners of Arlingtons, Bill Busetti and Ron Crandall, who have kindly provided me with photos of their sets. Alas, I do not have an Arlington of my own.

Wells Model 24 Receiver

Figures 9 and 10 are photographs of a Wells model 24 receiver currently on display in the office of the president of Wells today.



Figure 9 - Wells 24, courtesy of Wells Vehicle Elect.



Figure 10 - Wells 24, Top View

The Wells 24 was written up in the December 7, 1924 issue of the *Milwaukee Journal* in an article by "BCL", the *Journal's* radio writer, titled "Wisconsin Receiver for the Multitude". The article states: "Here's a Wisconsin-built radio receiver which, we venture to say, is "the set for the multitude" because it is low in price and high in performance. It is the Wells, made in Fond du Lac. It uses four tubes and is housed in a cabinet that affords room for three dry cell A batteries and small B and C batteries. We would advise the use of larger B batteries than the cabinet will hold, for the receiver contemplates putting 90 volts on the plates and tiny B batteries will prove short-lived and not economical under that strain. Our test was made with

dry cell tubes, but standard sockets are used and one can use 5-volt tubes and storage A battery, and should get some greater volume than with dry cell supply for the filaments.

"In about an hour one evening during test of this set 11 stations were logged, ranging from Houston, Texas, a station listed as 10 watts power, to Buffalo and Pittsburgh on the east; Shenandoah, Iowa on the west, and Minneapolis on the north, all on an indoor antenna, one of those coil springs, with water pipe ground. All, with the exception of the Texas station, came in with loudspeaker volume. At a previous test in the *Journal* building, where local induction is bad, [the set] performed remarkably well, bringing in a dozen stations in quick succession on the loud speaker."

"In an additional test, one station on the Pacific Coast and one in Cuba were brought in less than ten minutes apart. The set has fair selectivity, depending on the use of the potentiometer to achieve this end, but is not so sharp as to make tuning of DX stations too difficult for the average person. Used with a good outside antenna, the volume is surprising for dry cell tubes and on stations like KDKA, WGY, and WBZ, brings in music on headphones alone to be heard all over an apartment."

The Wells 24 was advertised in the *Milwaukee Journal* in December, 1924, by Schuster's, the largest department store in Milwaukee at the time: "A Gift Radio Will Be Enjoyed by All the Family - Wells Model 24 Receiver, 4-Tube Dry Cell Set at \$70". The ad describes the model 24: "No storage batteries to trouble you. This splendid Wells receiver uses dry batteries exclusively which are contained in special compartments within the set. Tuning easily accomplished by the use of one dial only. Vernier adjustment brings in long distance stations with remarkable clarity. A superior outfit throughout." The ad indicates that they will bring the set to your home for a demonstration and also offers other brand sets for a demonstration. The ad mentions that two other Wells sets are available, priced at \$65 and \$85, but provides no other information on the other sets.

The *Radio Set Directory* included in the March, 1925 issue of *Radio News*, p1663, lists the Wells 24 and two other models, the Wells 23 and 25, see figure 11, page 11. These are presumably the other two models referred to by price only in the December 1924 ad.

The *Set Catalog* included in the 1933 John F. Rider



Figure 11 - Wells Sets in the Radio News Radio set Directory, Radio News, March 1925, p1663.

“Complete Trouble Shooter’s Manual” (later reproduced by Ralph Langley and Morgan McMahon) lists the same three models for 1925, the Wells 23, 24 and 25. The Rider Set Catalog also lists four models for 1926, models 25, 27, 35 and 45, all TRF sets. The 1926 model 25 (not the same as the 1925 model 25) is listed as a three dialer with six tubes, 2 RF stages, a detector, and 3 audio stages. The model 27 was listed as a two dial, five tube set, with two RF stages and 2 audio stages. The models 35 and 45 were listed as three dial six tube sets, two RF stages and 3 AF stages. The model 45 was listed as a console model; all of the other Wells sets (for 1925 and 1926) were listed as table models. I don’t have any other information yet on any of the 1924 - 1926 Wells models except the model 24 (as described above) and I have a model 24 in my own collection.

Wells After Radio

As noted above, Wells may have been active in radio into 1931. The only evidence for that possibility I have is a copy of a check written by the Wells Manufacturing Company to one Herman Fabian for \$17.95. The letterhead on the check is “Wells Manufacturing Company, Manufacturers of Ignition Equipment and Radio and Electrical Specialties.

It is difficult to assess the relative importance of Wells as a 1920’s radio manufacturer. With so little information to go on (for example neither Wells nor its distributors seemed to have advertised very much in the local Fond du Lac market or the much larger nearby Milwaukee market) Wells has to be regarded as a minor manufacturer, but of distinctive products. The sets, especially the Alkire and Arlington, seem to have been quite well made, and I find the design of especially the 1922 Alkire set very appealing and I hope one day to find one.

A victim of the Depression, the company was bankrupt in 1931, but was sold and returned to life as the Wells Manufacturing Corporation, expanding its business in automotive ignition parts, and acquiring other companies to round out its automotive line. Wells produced Norden bombsights during World War II, and continues to the present as an active manufacturer of automotive electronics under the name Wells Vehicle Electronics.

I would like to express my great appreciation to Steve Hildebrand, Director of Marketing for Wells Vehicle Electronics for his kind invitation to visit Wells and see the two Wells sets (Arlington and Model 24) on display in the company president’s office. Steve provided me with copies of Wells internal history documents, and Teresa Flasch took excellent photographs of the two Wells sets. Thanks are also due to Dale Boyce and Ralph Larsen for Wells information they gave me, and to Stewart Oliver, Ron Crandall and Bill Buseti for photographs of their Wells sets.

References:

1. Wells internal historical summaries.
2. “Fondy to Have Large Radiophone Factory”, Daily Commonwealth, Fond du Lac WI, March 6, 1922.
3. Rider, John F., “Complete Perpetual Trouble Shooter's Manual”, Rider, 1933 (Set Catalog section).
4. “Radio Set Directory”, Radio News, March 1925, p1663.

Radio and the Farmer

BY WALDEMAR KAEMPFERT,

DAILY COMMONWEALTH, FOND DU LAC, WI, NOVEMBER 17, 1922

This article complements our article on the Wells Manufacturing Company of Fond du Lac. It shows thinking about the potential value of radio to rural listeners at the time when Wells was planning its entry into the business of manufacturing radio sets. It provides a fascinating peak into the world that radio was just beginning to transform, a world very different from our own (as indeed our world may differ from the world to come).

Susan Oldspell once wrote a short story called "Trifles" (afterwards dramatized) in which she depicted the tragic consequences of farm isolation – the passionate clinging of a lonely woman to a caged bird and the murderous revenge that she took when the one living thing she cherished was wantonly killed. Ten years from now, when radio will have completely linked the loneliest farms with the great city broadcasting stations, such a situation will be inconceivable.

Think of your introduction to radio and then interpret your experience in terms of the farm. First of all you probably tried to find out how many stations you could attune your set. Next you looked up stations in your newspaper or some call book in order to find out their distances. At once your thoughts were carried away hundreds of miles from your home. Then you have the secret of radio's rural significance. To get the farmers and cities to think of other places, to get them to think of something else than their immediate surroundings – that is one great function of radio.

The city dweller has theaters, concert halls, lecture rooms, cabarets, and music halls to furnish him with entertainment. To him the charm of radio lies more in the possibility of listening to the news and entertainment broadcasts by other cities. To the farmer, radio must mean much more. In the past, his one source of mutual pleasure has been the automatic piano and the phonograph. In the future radio will become the very breath of his intellectual life.

When City and Country Meet

The printed word, the telegraph and telephone have done much to break down class and sectional barriers. But how much more unified must the nation become when millions listen to the same address, to the same opera, to the same play broadcast from the stage.

Look at a map of the United States. Note the states, the

counties, the cities. Then think of the millions of farms too small to be marked at all, farms utterly cut off from the music and life of the towns. The names of great actors whose words thrill the city are unknown on the farm. Paderewski, Kreiser, the symphony orchestras of Philadelphia, Boston, Chicago and New York – what can they possibly mean to the men who ride on traction engines, to the women whose sole pleasure is an occasional church festival? Beethoven, Chopin, Schubert have no significance to them. No wonder that the farmer is still foolishly regarded as a "hick" in the comic papers, and no wonder that the farmer just as foolishly regards his city visitor as a "sissy".

The truth is that farm and city will grow to understand each other better when radio becomes the common possession of every household. As it is, the crop reports that are now broadcast even in the cities have already done much to teach city dwellers something of the farmer's struggle with nature – teach him respect for the oldest and most honorable calling in the world. And perhaps we would hear less of a farm "bloc" if the hard life of the town were better known to the country.

The Church and the Rural Congregation

Too many rural districts must now forego the spiritual influence of the church. What the radio influence of the church is destined to become in the country is even now foreshadowed. Every Sunday the few farmers who may own radio sets may listen to the sermons of great preachers in cities they may never visit. Dr. Stires of St. Thomas church in New York keeps the outlying country constantly in mind whenever his sermons are broadcast. "My invisible congregation", he calls the tens of thousands who listen to him. And how they listen! On the Connecticut farm eleven persons religiously gathered in a barn, where the radio set was installed, to drink in his words reverently, to kneel and pray with the congregation in New York, and even to

Radio and the Farmer - continued on Page 13

make a contribution to the church when the collection was taken up in St. Thomas's. One farmer who had not been to church in fifteen years sent Dr. Stires a fifty dollar Liberty Bond as his offering.

Radio is not destined to take the place of the country church. But in how many sparsely populated districts are services held every Sunday? In too many places there are either no church services at all in winter or services held only intermittently by itinerant ministers. It is in just such communities that radio fills a real Sunday need. Sundays it brings to the farmer the influence of a clerical personality far more powerful than any with which he has been familiar. Radio gives him the choice of half a dozen preachers. One farmer in the middle-west, the owner of a particularly sensitive long-range set, listens to three sermons every Sunday. He begins with New York and ends with Denver, the difference in time making it possible for him to go to church three times in a single morning.

College Courses by Radio

About forty million Americans live on farms. Already the agricultural colleges and the universities are planning radio courses for their benefit. Not more than 150,000 students are enrolled in agricultural colleges. Literally millions of men who must earn their livelihood by tilling and sowing the soil never receive the advantages of systematic, scientific agricultural training.

No wonder that the agricultural educators of the country realize the possibilities of radio. The tons of printed matter printed and distributed by the state and federal departments of agriculture, valuable as they are, are admittedly unread. They are dead. But radio is alive, and therein lays its tremendous power. Even blasé theatergoers listen enraptured to weather reports that come from a station a thousand miles away. It is this living charm, this perpetual romance of radio that must inevitably be applied in driving home the correct principles of agriculture.

A radio extension course can never be equal of a regular college tuition. There is no possibility of questioning the lecturer, of asking him to clear up obscure points. The educators realize this limitation and ingeniously suggest a way of overcoming it. They plan to combine correspondence courses with radio talks, the one supplementing the other. Thus the farmer will receive graphs, charts, and pictures by

mail. With them before him, he can follow the radio lecture that they will illustrate. Systematic lectures are already being attractively varied to include both agricultural information and concerts and readings. A radio committee of three sees to it that the agricultural lectures are properly coordinated much as they would be if they were delivered as part of a regular academic course.

Radio as a Business Trip

Agriculture is financially more hazardous than any other calling. It is dependent on the weather, on immunity from blight and the attacks of birds and insects, on the demand for farm products in distant Europe and on the abundance or shortage of crops in South America, Canada, and Australia. Raising and selling grain or fruit is really a highly important enterprise which can be successfully be conducted only with the aid of carefully classified, charted, and interpreted facts. The government and the farm press to do their best to present the facts. But the farmer, like the rest of us, is impressed with the need of decisive action only when an emergency confronts him. All the government bulletins on the trend of prices in nasty years, on the best ways of combatting corn smut or the gypsy moth fail to interest him in December. When the crisis comes in summer, where is the Department of Agriculture's pamphlet then? There is no time to consult a remote Washington authority. In just such emergencies radio now steps in. The immediacy of its information commands admiration. If a new animal disease makes its appearance the foremost authority on its treatment can broadcast from Washington itself to the entire country the very advice that the farmer needs. Thus the various agencies which the state and federal governments have created to aid the farmer with technical advice will become more effective.

At present, there are more than one hundred and thirty stations broadcasting weather reports and over eighty stations broadcasting market reports. So valuable is this service that the Department of Agriculture gives it as its opinion that every farmer in an important producing section should have a radio set. It means not only education and entertainment, but dollars and cents to him.

One farmer in Kansas wrote: "It was warm last evening. I thought that I could leave the cattle out all night. When I clamped on the radiophone a few hours

later I learned that we would have zero weather before morning. I went out at once and drove my horses, mules, and cows in to the barn. Some of them would have frozen to death, for sure enough, it was icy cold before dawn.”

What the ticker is to the city speculator in farm stocks a radio set is to the farmer. To both market reports, climatic conditions, droughts, the ravages of insects are highly important. Although the government, the various states, the agricultural colleges and the farm press have done their best to give the farmer the economic information that ought to guide him it is the shrewd city speculator and commission broker who makes prices. More information flows into the produce exchanges than out to the farms.

Even before radio came the Department of Agriculture began to realize the futility of sending out dead printed matter. It found demonstrations in the field, lectures in railway cars more practical and useful. Radio cannot take the place of these demonstrations and car lectures, but it can do much to spread by the spoken word the knowledge that the farmer needs, and just when he needs it.

Every harvesting season brings with it a labor problem to be solved. Here there is a shortage of labor; there an excess. Radio can surely play an important part in more evenly spreading the supply of available labor. The mere broadcasting of the news that a county is short of harvesting hands ought to be enough. European governments before the war systematically used the telephone and telegraph for the same purpose. But they dealt with the problem of excess or shortage of labor through municipal labor exchanges, and not directly with the laborers. It is because it is so direct in its appeal that radio is more likely to meet the requirements of the farms than the European labor exchange system with its telegraphed and telephoned bulletins. (30)



Badger Consignment
eBay Power-Seller

Turn your collection into profit-making treasures!

Badger Consignment is an eBay consignment dealer with 12 yrs. experience specializing in high end antique tube radios and hi-fi tube audio components (i.e. tube amps, pre-amp, receivers, tuners, and much more).

If you have items you would like sold or repaired/restored call WARC member Ben Bensaïd at (262)-581-5453, Ben@badgerconsignment.com or visit our website at: www.badgerconsignment.com

Discovery World of Milwaukee - “Tesla Lives!” Show

Filling the stage with 20 million volts of roaring, crackling, sizzling electricity, a continuing live theater show **TESLA LIVES!** delivers an energetic and sometimes humorous glimpse into how our modern world was designed by the godfather of the 21st century, Nikola Tesla. Through Discovery World's latest theater production, audiences will meet the genius who invented the modern world and find the genius within themselves.

See www.teslalives.com for information.



Radiofest 2012

August 2-4

Thursday – Friday – Saturday



Willowbrook Holiday Inn
7800 South Kingery Hwy (Rte 83 & I-55)
Willowbrook, IL 60527 (1-630-325-6400)

MARCONI / TITANIC CENTENNIAL COMMEMORATION

Plus: "Lee de Forest: King of Radio, Television & Film" - Book Signing By Mike Adams

THURSDAY

- Setup Day (**NO SALES**)
- Main Auction 6:30pm in the Ballroom using big screen video. Followed By A Free Pizza Party!! (ARCI Members)
- Pre-Registration Packets Available After 5pm

FRIDAY

- 7am Radiofest Opens
- Registration open
- Flea Market open All Day
- Noon - Ladies Luncheon
- Educational Programs
- Ham Radio Ops All Day
- Hospitality Tent All Day
- Hotel Food Service

MARCONI / TITANIC SPECIAL EXHIBIT

- Emergence of Wireless Rescue Radio
- Marconi Artifacts & Documentation
- Titanic Items

EQUIPMENT CONTEST

- 1 Radios Pre 1930
- 2 Radios Pre WWII (1945)
3. Radios Post WWII (1946)
- 4 Art Deco Radios
- 5 Catlin, Rare, Plastic Radios
- 6 Speakers
- 7 Transistor, Novelty Radios
- 8 Vacuum Tube Audio
- 9 Radios Made In Midwest
10. Ham/Military Radio
11. Open

LADIES LUNCHEON *Noon*

FRIDAY NIGHT BANQUET

Book Signing: *Lee de Forest: King of Radio, Television & Film*
By Mike Adams
Dinner
Recognition Awards
Contest Awards

ENTERTAINMENT



MISSISSIPPI FLANNIGAN

SATURDAY

- Free Sellers' Raffle 9:15am
- Donation Auction 9:30am
- Ham Radio License VE Tests
- Flea Market Until Noon

FRIDAY PROGRAMS

Vacuum Tube Audio Panel - *Karl Johnson, Pete Nauseda and Terry Shaver*
Museum Tour: Pavek Museum Of Broadcasting in Minnesota - *Steve Raymer*
The Ham Radio Forum (Heavy Metal – WLW Cincinnati) - *Bill Ross (W9WR)*
E. H. Scott - *Kent King, Scott Historian*
Lee de Forest: Movies & Sound – Presentation & Book Signing - *Mike Adams*

IMPORTANT INFORMATION

ARCI Registration Form: <http://www.antique-radios.org>. **Pre-Registration Deadline:** July 1.

Hotel Reservations: Front Desk 1-630-325-6400. Ask for ARCI room rate of \$99.00 per night.

Seller Fees: 1st space: \$45 pre-reg./\$50 onsite. Additional spaces: \$25 pre-reg./\$35 onsite. Saturday Only \$30. Banquet tickets: \$25/person, \$45/couple. **8' TABLE RENTALS** \$15 each (pre-registration only). No charge for general admission. Membership required to attend programs.

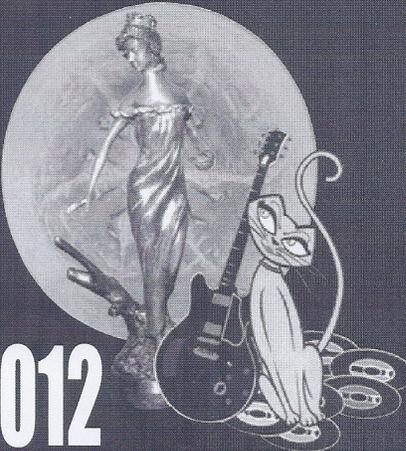
Questions? Call 630-739-1060. See www.antique-radios.org.

WARCI Radio Services

We now have a list of WARCI members who would be willing to provide repair / restoration services, advice or research for folks who contact WARCI looking for help. If you would like to be added to the list, please let me (Greg) or one of the Board members know.

Name	Email	Telephone	Service Available
Dwight Church	(none)	414-545-6972	Radio repair – electronics only.
Bill Engaas	craftyradio@earthlink.net	262-786-8183	Speaker Repair.
Ralph Larsen	radiatoralph@hotmail.com	414-278-7981	Repair, including Television.
Mike Lewis	deepheart@att.net	608-835-7193	Repair, restoration, training.
Ben Bensaid	Ben@badgerconsignment.com	262-581-5453	Repair and restoration.
Greg Hunolt	ghunolt@excel.net	920-893-0422	Research, especially on 1920's radios.

CHICAGOLAND ANTIQU RADIO SHOW AUGUST 11 & 12, 2012



Phonograph, Mechanical Music, Coin-Op, Music Box, Antique Radios, HAM, Records, 33's-45's-'78's & More!

Show Hours: Sat. 10am - 4pm • Sun. 8am - 3pm / \$6

Held during the Premiere Grayslake Antique Market

LAKE COUNTY FAIRGROUNDS

1060 E. PETERSON RD., GRAYSLAKE, IL 60030
1/2 W. of Rt. 45 on Peterson Rd & Midlothian Rd.
IF USING A GPS, PLEASE ENTER THIS ADDRESS:
19822 PETERSON ROAD, LIBERTYVILLE, IL 60048

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GRAYSLAKE, IL • LAKE COUNTY FAIRGROUNDS • VENDORS WELCOME!

Chicagoland Antique Radio Show and WARCI

The two day show is indoors in a really nice expo hall with plenty of free electricity. We have run an ad in the May and July newsletters, it is on our website now, and we'll have flyers with forms at the meets coming up. In exchange for our support, Tim Zurko has kindly offered to make six tables available to WARCI without charge to give the club a presence at the event. Tim is also extending to WARCI members a buy one, get one free offer for tables.

The new expo building at Grayslake is big, but the radio show is a show within the Grayslake Antique Market that will be sectioned off with pipe & drape. There will be a limited number of spaces available for the radio show, and Tim recommends that you sign up as early as possible because spaces could sell out. You can mail in a deposit with the sign-up flyer to hold a spot. Be sure to note on the form that you are a WARCI member. If you have questions, please contact Tim Zurko at TRZurko@Bemis.com.

News from the Neighboring Clubs

ARCI

Antique Radio Club of Illinois

www.antique-radios.org

RADIOFEST 2012 WILL COMMEMORATE THE CENTENNIAL OF THE TITANIC AND MARCONI WIRELESS RADIO

Radiofest 2012 will take place August 2nd through 4th as we return to the **Willowbrook Holiday Inn Conference Center**. Our theme will be "Titanic Centennial – Marconi & Wireless Radio" marking the 100th anniversary of the Titanic disaster. Brochures for **Radiofest 2012** will be mailed to all ARCI members, Midwestern radio clubs, and members of the Antique Wireless Association in the greater mid-west region and central Canada. So far, registrations are on track with prior years and we look forward to a great show. Don't miss this opportunity to attend one of the premier radio collecting events in the country! Bring the whole family, they will love the show!

Last year, we estimated that approximately 1,000 people attended from some 15 states and four countries. We expanded our parking arrangements, making the show more comfortable and spread out. Sellers and visitors alike were enthusiastic about a fantastic line up of speakers and the flea market was a big success! We are looking forward to another great year at *Radiofest*, so secure your flea market spot, make your hotel reservation and register early!!

See page 15 and the ARCI website for details.

WARCI Needs You!

If you would like to become more active in WARCI, please step up! Organizations like WARCI depend upon volunteers for their success. Areas where you can help include:

Public relations.

Providing radio services such as repair / restoration.

Contribute newsletter articles or information from which an article can be written.

Contribute items for the WARCI website – such as photos of your Wisconsin-made radios to add to our gallery.

Give us your ideas on how we can make WARCI better for you!

New Rules for New Member Dues

WARCI membership runs January to December. But we do get new members joining later in the year. To accommodate them, the WARCI Board has agreed to a new policy for membership dues for late joiners. From now on, if a person joins in July, we'll charge \$20 and include the following year. If a person joins in September, we'll just charge \$15

Donation Auction Rules

We will have an area marked off for donated items. Once you place an item in that area, it is donated to the club and becomes the property of the club, and will be auctioned or disposed of if it does not sell at the auction. No one may remove a donated item from the donation area prior to the auction. So, while we very much appreciate your donations, please don't place an item in the donation auction until you're sure you want to donate it. Or, if you see an item of interest in the donation area, don't ask the donor to reclaim it—the item no longer belongs to the donor.

Classified Ads

WANTED: All things Hallicrafters! Receivers, transmitters, accessories, television sets, test equipment, signs, books, etc. Also silver-Marshall (1933-34) and Echophone.
Stan Broome, 108 East Main street, Sun Prairie, WI 53590, 608-520-6290.

HELP NEEDED: Would like to contact owners of 1920's battery sets, literature, and equipment made by Globe Electric Company of Milwaukee, WI, to survey existing model types and variations for development of a company history. All responses will be kept confidential. Thanks.
Glenn Trischan, P.O. Box 240022, Milwaukee, WI 53224. E-mail: gnets142@att.net.

WANTED: Any set made in Plymouth, WI, by the Plymouth Radio and Phonograph Co., and Arlington, Alkire, or other sets made by the Wells Manufacturing Co. of Fond du Lac, WI.
Greg Hunolt, N5412 State Hwy 57, Plymouth, WI 53073, Email ghunolt@excel.net or 920-893-0422.

TRAINING & SERVICE: Michael Lewis -- Radio Restoration Education & Consultation

I'm available to refurbish (90 day guarantee) or fully restore (1 year guarantee) your antique radios. Estimates can usually be provided in 2-3 weeks from the time you drop off your set at my shop in rural Oregon, WI (a bit SW of Madison). The cost for an estimate is \$25, which can be applied towards a final bill if you hire me to work on your radio. Full restoration includes testing all tubes, capacitors, and resistors, with replacement as needed. Power supplies are modified to operate safely at 120 VAC. Chassis are dusted off, variable capacitors are flushed with residueless cleaner, and switches & pots are treated with contact cleaner. Moving parts are lubricated. Sets are aligned with digital RF generators, tested for proper operation, and "burned in" to reveal any intermittent problems.

I have over 30 years' experience in electronically restoring antique radios (I don't restore radio cabinets). For most of this time I've also taught others how to do radio restoration. I can be hired for 4- or 8-hr. blocks of bench time. You will have access to DMMs, digital audio and RF generators, capacitor and inductor analyzers, power supplies, and much other test equipment. I stock 1/4, 1/2, 1, 2, 5, and 10W resistors. Capacitor stock includes 75 values of mylars; micas & ceramics; electrolytics from 25 WVDC to 450 WVDC. Tubes are available to my students, as well as technical literature including Rider, Beitman, and Gernsback manuals, factory manuals, and Sams Photofacts. Whether you've never soldered before, or regularly restore radios & are stuck on a "tough dog," chances are I can help.

Michael Lewis, 6070 County Road D, Oregon, WI 53575, Phone: 608-835-7193, Email: deepheart@att.net

WANTED: DeForest Plug-In Butterfly Coils - Terry Hanney, 414-545-6425

Remember that classified ads up to about ¼ page are free to WARCI members.

The cut-off date for all newsletter material is about the 15th of the month preceding publication of the next newsletter (e.g. August 15, 2012 for the September, 2012 issue). Send ads by email or letter to Greg Hunolt, WARCI News, at ghunolt@excel.net or N5412 State Hwy 57, Plymouth WI, 53073.