



Motorola model 61K22

**Same Location for
January 21 Meet**

Knights of Columbus, 1800 So.
92nd Street, West Allis, Wi.

8 - 11 AM Swapmeet

Buyers use lobby entrance, follow
the signs. Sellers use double doors
just west of the lobby for unloading.
Doors open for set up at 7:00AM

Open to public at 8AM.

Next WARCI Meet :

Sunday January 21, 2018: 8:00 -11:00 AM
Doors open at 7 AM for setup indoors

**Knights of Columbus, (see map insert page
24), 1800 So. 92nd Street, West Allis, Wi**

**Features: Swap Meet, 50-50 Raffle,
donation auction, Free Pizza**

Inside This Issue...

For the Record.....	2
WARCI News...Club News and Doings.....	3
News from Neighboring Clubs.....	5
Grandpas New Radio by Herman Gross.....	6
Classified Ads.....	20
WARCI Services.....	23

WARCI, INC.

The Wisconsin Antique Radio Club, Inc. exists to preserve the knowledge of radio, television, and other related technologies. We have a special interest in the history of radio in Wisconsin, radio companies, radio stations, etc. Our members' interests include radio, television, audio, microphones, jukeboxes, and antique phonographs.

Officers and Board

President	Nick Tillich president@warci.org 262 271-1564
Vice President	Terry Hanney earlyradiosets@gmail.com 414 545-6425
Treasurer.....	Bill Engaas CraftyradioBK@yahoo.com 262-735- 4589/414-217-6001
Secretary.....	Mike Sajdowitz msajdowitz1@gmail.com 262-544-1486/262-352-1148
Board - Dale Boyce, Mike Krawczyk, Jim Menning, and Dennis Schrank	
WARCI News Editor.....	Mike Sajdowitz msajdowitz1@gmail.com
WARCI Website.....	Nick Tillich webmaster@warci.org

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 September or November.) Seller's fee at Swap Meets is \$7.00 for members, \$10 for non-members. The next Swap Meet will be held on Sunday January 21, 2018, at the Knights of Columbus, (see map insert page 20), 1800 So. 92nd Street, West Allis, Wi

WARCI News

This newsletter is the official publication of the “ Wisconsin Antique Radio Club, Inc”. It is published five times per year, in January, March, May, July and September. In November a post card announcing the up coming years swap dates will be mailed. The WARCI News is free to all paid-up club members.

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Classified ads up to 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 news-letter (e.g. December 15 for the January issue.)

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 policy for membership dues for late joiners. From now on, if a person joins at the September meet, we'll charge \$6 for the remainder of the year. If a person joins at the November meet, we'll just charge \$15 and include the following year.

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 !

WARCI NEWS AND DOINGS

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.

Simple text is best. PC format (e.g. MS Word, separate jpegs by email) is preferred, but hard-copy text and photos are accepted.

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

Thank you, and I look forward to seeing all of you at the January meet,

- Mike Sajdowitz, Editor, WARCI News

Membership Update

Continuing great news! We have finished 2017 with 96 paid members. This is up from 82 paid members in 2016, 76 in 2015, 76 paid members in 2014. Looking farther back, we had 58 members in 2012 and just 44 members in 2011

NEW MEMBER

BOB LUTHER



RADIO ROOTS
OLD TIME RADIO
TUESDAYS 10:00AM-NOON

WRLR 98.3FM
ROUND LAKE HEIGHTS ILLINOIS

Streaming world wide: wrlr.fm

RICK HAGERTY
PRODUCER-HOST

ricksradioroots@gmail.com

Looking ahead to 2018

If you have noticed on the postcards that were mailed to you, we have a lot of dates set aside for WARCI to round out 2018. If you notice we again have 2 Madison Chapter meets this year, one in April and one in October. The previous Madison meet held last year was a huge success. So this is why the board decided on 2 meets for 2018. Plus we added the Ozaukee radio club swapfest in May 2018 to give us more exposure for our club. If you can make it, we would like to see you there to show our support from WARCI!!!

September & November Meeting Notes

Since there was no newsletter in November, I will combine September and November meeting notes on this page. September was our 5th meet of the year at the Landmark/ Terminal. Since this was a no seller fee event, there were 29 sellers on the property and an attendance of 81 people. The 50-50 raffle brought in \$26.50 to the club, and the donation auction drew in \$65.00 over 31 items. Clothing sales sold \$28.00 in either T-shirts or sweatshirts. The Madison chapter meet (August 20th) produced 20 sellers, and 57 people. Clothing sales sold 0 items.

November 5th meet was the last meet of the year at the Landmark/Terminal. There were 17 sellers 3 of which were non-members. Bob Kasley was brave enough to sell outside. There was no attendance account made at this meet. The donation auction was small and only brought in \$20.00 to the club. Clothing sales sold \$42.00 worth of items. The 50-50 raffle brought in \$19.00.

2018 Elected Members

President - Nick Tillich

Vice President - Terry Hanney

Secretary - Mike Sajdowitz

Treasurer - Bill Engaas

**Board Members- Dale Boyce, Mike Krawczyk,
Jim Menning, Dennis Schrank**

Coming up in the March Issue

Dave DeRosier's restored 1933 Zenith Console
and

A look at Stan Broome's Radio Museum
In Sun Prairie, Wisconsin

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. Check out Bob's website,

<http://www.sssmilwaukee.com/Microphone%20Museum.html>

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



NEWS FROM NEIGHBORING CLUBS

MARC

Michigan Antique Radio Club

Vintage Electronics Expo

January 27th, 2018

MARC's 2018 Extravaganza will be held in a new location, the Costick Center Farmington Hills, 9AM- 3PM . 28600 Eleven Mile Road., just east of Middlebelt, Mi "We will be able to hold the entire event INSIDE the same air-conditioned space. No longer will weather, be it rain or extreme heat, be a concern. The space offers amenities such as high quality food service, multiple rest rooms, and Wi-Fi access." There are several hotels within two miles of the Expo Center and, "for the hardy", campsites on the Expo grounds. MARC has held meets at the Expo Center and has always been happy with the site. michiganantiqueradio.org

NARC

Northland Antique Radio Club

NARC will hold its workshop Sunday, February 18, 2018, at the Pavek Museum of Broadcasting, 3517 Raleigh Avenue, St. Louis Park, MN.

The event is free for all current and renewing NARC members. It also provides a great opportunity to visit the excellent Pavek museum.

www.NorthlandAntiqueRadioClub.com

ARCI

Antique Radio Club of Illinois

ARCI will hold an indoor swap meet, people's choice contest, on February 25, 2018 from 7AM - 9:30AM at the American Legion Hall, 570 South Gary Avenue, Carol Stream, IL. Officers' meeting starts at 9:00AM.

The meet features the Boy Scout Pancake Breakfast with free coffee, juice, and cookies.

The next swap meet will be held on April 29, 2018 at the American Legion Hall in Carol Stream, IL .

www.antique-radios.org

GRANDPA'S NEW RADIO

By: Herman Gross

It was November of 1940. I was 8 years old. We were enjoying Thanksgiving dinner at our home in Bristol, WI. with a couple relatives from my Dad's side of the family when someone rapped on the door. It was our neighbor with an urgent message for my mother. We had no phone in those days. It was from my mom's family telling her that her mother's condition was deteriorating fast and she was not expected to live. We left the guests, hopped in the old Chevy and, driving at the breakneck speed of 50mph, proceeded to the farm about 30 miles away. Sadly, as we entered the driveway we were greeted by a couple of mom's sisters (there were 12 children in the family) with the news that grandma had just passed on. My mother was devastated that she didn't get there in time and regretted that all her life.

We went into the very small dimly lit farmhouse. I'd never been in most of it that I remember except once for Christmas where I recall seeing a Christmas tree with candles on it....no lights. I found out only this year (2009) that there was no electricity in the house at that time. It took the Rural Electrification program after WW2 to correct that situation. Anyway, one other thing I vividly remember seeing that day was what I perceived as a long and narrow radio with a shiny black front panel with big knobs on it. I guess the knobs were my clue. I don't remember seeing a speaker but then I'm not sure I'd have recognized it anyway.



Well, time passed and a few years following grandma's death grandpa put the farm up for auction. We didn't go and I suppose the old radio was sold with everything else, including that neat old sleigh that looked just like Santa Claus'. Grandpa and his youngest daughter Ruth went to live in Kenosha, WI. in an apartment over a store. It was probably about 1942. Before the move, sometime in 1941 I'm told, Grandpa bought a new, no frills, AM / SW console radio. Aunt Ruth intimated she thought grandpa had bought the radio with some of grandma's insurance money. What provenance!

Fast forward about 55 years to 1995. At our yearly family reunion in Racine, WI. my recently widowed Aunt Ruth said to me, "I heard you like old radios. Would you like to have grandpa's?" Of course I quickly accepted. "It's been upstairs in a closet for a long time and we have no use for it" she said.

Continued on page 7

I was told the program grandpa listened to “religiously” was “The Lutheran Hour” every Sunday morning on station WLIP, Kenosha, and he also listened to Voice Of America broadcasts during WW2 in his native German language. Who wouldn’t guess that grandpa was German through and through with a name like Karl Hermann Wilhelm von Reck? I’d guess he probably listened to propaganda messages aimed at Hitler’s Grossdeutsches Reich. That same day she offered the radio to me I went to her house in Kenosha and retrieved it from deep in the back of a large upstairs closet. I was glad it hadn’t been stored in an attic or basement. It was a Motorola model 61K22.

I found the model number stamped on the chassis. but it was partly smudged and left some doubt as to which model it was. There was no paper label on the inside of the cabinet (Fig 1). Later I discovered (and confirmed) the model number faintly printed on the loop antenna assembly (Fig 2). The radio sat covered and almost forgotten in my garage for many years until I finally decided I’d better do something with it. I kind’a wanted to get grandpa’s radio going again so I could listen to “The Lutheran Hour” too, at least just once. Too bad VOA is kaput

I have to brag a bit about the *celebrity status* this very radio has in my locality, having been an important prop in the stage play ANNIE, put on by the local Civic Theatre group. You might recall the scenes when FDR, with some of his cabinet members, huddled around the radio listening for news of the war. Well, this is the exact radio that prominently occupied center stage with FDR and his cronies in that production. “Golly Sandy, I’m so proud!”

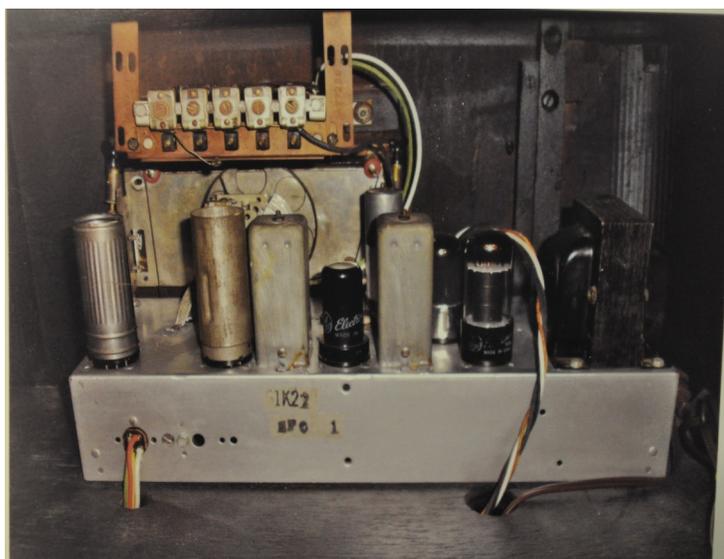


Fig 1

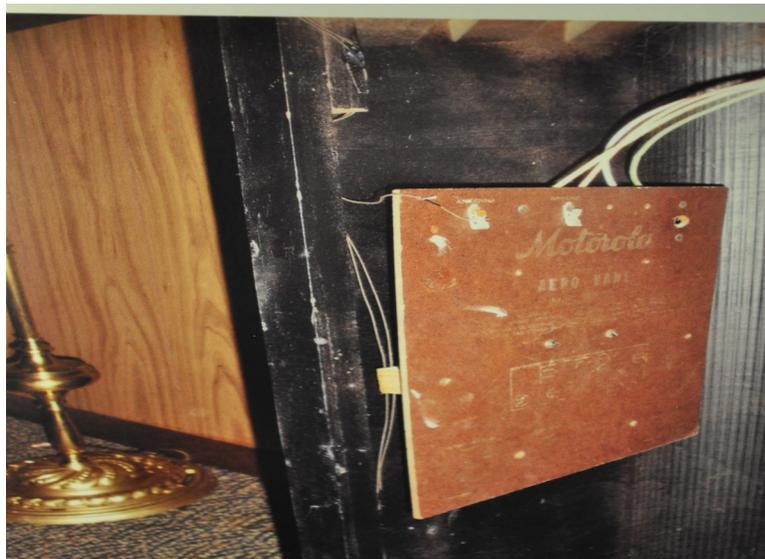


Fig 2

Now to get down to brass tacks. The first thing I did was remove everything from the cabinet. It had quite an accumulation of dust. Then I put all but the fragile speaker, remote push button (PB) tuning assembly and loop antenna out on the driveway and blew out most of the dust with the shop-vac, using a soft brush on stubborn areas.

I have a kit of about 6 pieces that I connect to my shop-vac that allows me to vacuum and brush in very tight places at various angles, and can also blow out dust by reversing the connection to the shop-vac. I bought it several years ago in the vacuum cleaner parts department at a Meijer store for about \$12.00, and it has been very handy. Inexpensive acid brushes are great for cleaning in tight spaces too of course.

Continued on page 8

The 10" electrodynamic speaker and radio chassis were in excellent condition with minimal corrosion and no rust. I stored the speaker, remote PB sub-chassis and side mounted loop antenna in separate boxes for safe keeping while I worked on other things. I decided to "attack" the cabinet first and do the electronics sort of catch as catch can. Judging from the looks of the cabinet I suspect Aunt Ruth's family used the radio for a long time after grandpa's passing. It had quite a few dings and scrapes and the base had evidence of being run into by their old "Bissell's Standard" carpet sweeper too many times. Also, it had a coat or two of dark walnut varnish stain slathered on it, knobs and all. That had to go! It looked awful.



Figure 3

I took several photographs of the console including close-ups of the lettering identifying the front controls and also made a sketch of important dimensions, so the replacement lettering could be positioned correctly (Fig 3). I removed the speaker mounting board. The grille cloth was glued to it. The grille cloth, although intact, was so marred with that varnish stain treatment or furniture polish I opted to replace it with some material I purchased from Radio Daze that closely matched. Then I removed the five vertical bars in front of the speaker/grille assembly. I've heard that arrangement of vertical bars has been called the "waterfall" effect by some.

I located some of the old "Zip Strip" varnish remover left over in rusting cans from the days when Shirley and I refinished a couple of my mother's small furniture items removing, of course, multiple coats of walnut varnish stain. I started using plastic scrapers to get the bulk off (they melted pretty fast) then switched to medium coarse steel wool and ending with 0000. I used some lacquer thinner on a soft rag for a final clean up wash, always sure to use eye protection and rubber gloves for this whole operation. It worked very well and uncovered a beautiful walnut veneer. All this was done outdoors to keep the mess outside but mainly for good ventilation.

Before attempting any refinishing I replaced the veneer that had gotten chipped off in about a dozen spots along the rear edges. None were larger than a nickel, so they are not too evident. Veneer that closely resembled the existing wood was used and I minimized the evidence of the repairs with some subtle shading. Two curved areas where the cabinet sides meet the top, called "shoulders" I believe, were stained very dark with Mohawk Extra Dark Walnut toning lacquer. The same finish was applied to the base at the very bottom of the cabinet (Fig 4).

Continued on page 9

I originally tried using some Min-Wax dark Jacobean stain but it ran too much on the smooth curved surface and wouldn't cover evenly no matter how sparingly I brushed it on. The lacquer covered evenly and dried almost immediately without running. Sure, it will run if you don't spray it sparingly but I've learned the hard way to walk away after each thin application to resist giving it another "shot"



Figure 4

A 3" band around the top and bottom was taped off and given a thin coat of dark walnut stain to give some contrast...a nice transition from the main body of the cabinet. This was in accordance with the photos taken before stripping the cabinet. Actually Aunt Ruth applied so much walnut varnish stain that it was difficult to see the contrasting bands....but they were there originally and are there now.

I used the same dark walnut stain on the five vertical bars mentioned earlier to make them look close to the original color. In preparation I had to fill, sand and stain several nicks and gouges in a couple of them, probably put there decades ago by my cousins rough-housing around.

I debated as to what to use for the final finish, lacquer or polyurethane. I have a friend who says that if they had polyurethane back in those days they would have used it. I opted for spray lacquer because it dries faster so is more immune from flying dust particles and I can apply more coats in a short amount of time. I didn't consider filling the grain with walnut sanding sealer because the stain can bleed over to the wood and make the whole thing darker. I know you can fill after you give the cabinet a thin coat of what ever finish material you elect but since I didn't have any suitable sealer on hand in the first place I used the method outlined in my favorite wood finishing book *Understanding Wood Finishing* by Bob Flexner and that is apply a couple coats of finish and then sand lightly. Repeat as necessary until the voids are filled. I repeated this procedure so many times I lost count. The open grain was deep in some places. One factor in the slow buildup of finish material is that in the spray can lacquer I use there is only 10 to 20% solids, the remainder being solvent. Towards the end I wasn't so sure I made the right decision but the die was cast. Everyone who reads this will have a different opinion as to the best way to do the job.

By the way, having been warned in a previously published article in an IHRS Bulletin by member Ed Dupart, whenever I had to do some taping I was careful to use lacquer compatible tape.

Continued on page 10

I initially applied three thin coats, being careful to avoid runners, before I started to very lightly sand it with 320 grit paper. From then out I sanded between every second coat. I have a law I follow regarding spraying anything. Be careful to apply only the minimum so as to avoid runners and blushing and then quickly walk away to avoid the urge to spray on more before the preceding coat is completely dry. Patience is a virtue in this case. I've run into this blushing problem a few times and it is a worrisome thing. Blushing occurs during warm humid weather and the thicker the coat the worse it can be. The rapid evaporation of the lacquer thinner cools the surface so fast that humidity in the air is drawn into the film. The moisture will usually work its way out on its own in a couple hours or overnight. Otherwise, in stubborn cases, you can spray on a light coat of lacquer retarder to re-dissolve the finish so the moisture can escape.

A friend of mine gave me this hint regarding spraying lacquer. Don't do it under bright- bright lights. He made the case that as you spray you might see an area you just went over that seems duller than the surrounding area and you'll want to quickly go back and "touch it up". This can easily develop in a situation where you'll have excess spray in that dull area which can lead to runners if the surface is not quite level. I admit I've done that.

In spite of all my cautions I did get a few runners. Here's how I get rid of them. It works well with lacquer. The runner must be fully cured, preferably overnight. I take a single edged razor and hold it perpendicular to the surface with the sharp edge only touching the raised runner. Then I carefully scrape off the material until it's level with the adjacent surfaces. It's quick and easy...if you're careful. It does mean I had to recoat that area. All this being said, the final finish turned out very nice.

The inside of the cabinet was cleaned as best I could but it still looked dingy so I sprayed it with flat black enamel which made quite an improvement (*Fig 5*).

I stapled the new 16 X 24 inch piece of grille cloth centered along the top edge of the baffle board using 1/4" staples and a power stapler being sure to stretch the fabric left to right. It helps to mark the centerline of the board at the top and bottom edges.



Figure 5

Continued on page 11

I placed the staples about 1” apart. Then I stretched the fabric as tightly as I could at the bottom of the board using many spring type clamps and push pins spaced about one inch apart or so to hold it in place. With *patterned material* it is essential to use a couple straight edge devices, such as yardsticks, to insure that the pattern is aligned left to right and top to bottom.

Keeping an eye on the L-R alignment of the pattern along the vertical center-line marker, I stretched the material down and placed one staple at the bottom center, then adjusted the tension across the bottom edge to assure the pattern was aligned top-to-bottom using another straight edge as a guide at right angles to the vertical guide. This is very time consuming. Once done, I stapled the whole bottom edge being very careful not to loosen the material. I placed staples at approximately 1” intervals here too. Now for the edges.

With the vertical marker in place at the center-line of the baffle board I gently tugged along both edges to tighten up the fabric all the time keeping an eye on the vertical guide to make sure the fabric was centered along the whole vertical distance. I didn’t want any waviness. I clamped the edges in place and then stapled both sides at close intervals. I also glued around the outside edges to insure no possibility of fabric creep. Again, all these precautions with tension, straight edge guides and close spaced fasteners was essential to maintain pattern alignment in both the X and Y axes.



Figure 6

Continued on page 12

Several years ago I purchased some decals from AES that I never used so here was my opportunity. But, they were too transparent for use on a darker surface so I couldn't use them. I found some sets of general-purpose decals that worked out perfectly at Radio Daze. I lack the 2-inch "Motorola" decal. With the photos taken of the original cabinet and the sketches I made as a reference, I laid out a plan for the accurate placement of the control function identification. The job was made a bit easier in that no semi-circular patterns were necessary. With the radio temporarily installed and knobs in place I carefully marked the various switch positions and other control functions on a masking tape level reference using the knob pointers as a guide. This made for a perfectly acceptable panel layout (*FIG 6*).

The actual application was not fun. My slight hand tremors didn't help. It was nerve wracking trying to persuade those water slide decals to move to their proper places. I gingerly used a sharp pointed scalpel and a damp artists brush as persuaders. Once I got one or two decals in place I'd stop and let them dry so I wouldn't damage them when trying to apply the others. I did ruin a couple decals through this whole process but the final product looks quite professional and I'm very happy with it. I experimented with what to seal the decals. I placed a couple of them on a piece of glass and let them dry for several days. Then I sprayed some of the same clear lacquer I used for the cabinet in a glass jar (that was an experience!) and, using a soft artists brush, covered the decals twice. I was afraid they might crinkle or something but they didn't, so that's what I did to those on the cabinet. They look great. I recently read a couple articles in MAARC's *Radio Age* about cabinet restoration. The author referred to "pita" a couple times when describing placement of decals and stretching new grille cloth. I never did figure out the connection between a type of bread, decals and grille cloth. Any ideas?

As for the speaker: I carefully removed any dust accumulation. After routine resistance checks, which were all within specs, I applied current to the field from an adjustable power supply, and then connected the voice coil to a small utility amplifier I keep in the workshop. Using an audio generator as a signal source I ran the speaker through a range of frequencies at fairly high volume to check for any audible distortion or resonances. Happily there was none that I could hear and it was deemed "ready to go" except for the rotting insulation on the four-wire interconnect cable. I had to rebuild it, but that's usually par for the course on these old radios.

Restoring the remote permeability tuned push button (PB) assembly couldn't take place until it was carefully cleaned. "Carefully" because those five oscillator coils on the PB assembly are wound with hair thin wire. One of them was broken and I had to reconnect it...a ticklish job requiring a steady hand...which mine is not these days. I replaced the three wires in the interconnect cable. The PB action was another story. It was dry as a bone and "moveable" parts didn't move. Also the sliding contacts were black with corrosion. After a good, all over, bath with contact cleaner/lubricant they started to work sluggishly. It finally took a couple drops of 3-in-1 oil on the sliding actuator mechanism before each PB would consistently work properly. I repeatedly exercised all 5 PBs until satisfied with their operation.

Then I started on the chassis by first checking the power transformer by applying 10 volts to the primary and measuring the secondary voltages. They were close enough. I gradually increased the voltage and all seemed OK. No visual or audible evidence of any problem. It was nice to see the power switch worked. Then I went through the usual routine of replacing all the paper capacitors with Mylar/polyester film units. There were 12.

I don't just clip the wires and tack in a new part. I unsolder all the connections using a solder sucker or copper braid and then replace the part, trying not to overheat things in the process. I just feel better about doing it that way. Does take a lot of time though. I rarely find that I need to replace mica capacitors. I also checked all the resistors and had to replace a few because of out-of-tolerance conditions. To my surprise, there were a couple of the old "dogbone" or "body end dot" resistors. I replaced all but one of them, it being in tolerance and in a non-critical circuit application. The three electrolytics were in a can mounted on a socket on top of the chassis. There was plenty of room to tack discrete capacitors under the chassis but, like the nut that I am, I opened the can and mounted two 47 mfd, 400 vdc, replacement capacitors in it, bringing out leads from the bottom.

There was no room for the 20mfd, 25 vdc, cap originally in the case too so I mounted a 22mfd,160vdc, capacitor under the chassis....oh well. Anyway, now there's no hole in the chassis where the can would've been. Of course I replaced the line cord and tested all the tubes.

Only one tube was weak (but functional). It was the mixer, a 6SD7GT. I had no spares, so ordered one when I ordered the grille cloth from Radio Daze. This is the first time I'd run across the 6SD7. It's a semi-remote-cutoff pentode. This radio uses a 6J5 for the oscillator. Did the designers use this tube for it's avc characteristics or just to add to the tube count because of the separate oscillator? It was probably designed just prior to WW2. We'll never know.

On the bottom of the chassis at each corner is a bracket on which a red rubber ring was placed as a vibration isolator. They were mashed down flat and hard as a rock. They were replaced with large rubber grommets that worked quite well. I went through the usual procedure of such things as cleaning all dust between the tuning capacitor plates and lubricating the bearings. I gave the volume control a shot of cleaner/lubricant just on general principles...after all it's 67 years old and needed some attention I thought. The band switch and three position tone switch were cruddy so I gave them the same treatment as well. The open construction (cheap and simple) tone switch operation was smoothed with a light coating of petroleum jelly over the contact area. The chassis was nice and clean and only required a slight dusting and going over with a damp cloth here and there.

The initial cleaning of the band switch was not effective. I think the switch had been left in the center BC position for decades so initially it worked only for that band. The silver plating had turned so black that it took a great amount of exercising and multiple shots of several different brands of cleaner/lubricant to do the job. I resisted the urge to scrape the corrosion off the contacts with a scalpel.

Continued on page 14

The dial had seen better days. The glass was missing. The slide rule dial pointer was broken off and missing leaving only the small traveling part that slides on the track at the top. The dial scale was scratched in several places. I doctored up the scratches with Testor's model paint and a fine tipped permanent black marker making the dial look quite acceptable.

Now, what to do about the dial pointer? I had a couple "spares" in my "old parts" box but of course they weren't even close size-wise. I considered using a piece of buss wire but couldn't get it straight enough and it looked like a piece of wire...sort of cheap. I needed a narrow, stiff, somewhat flat piece of "something" for the pointer. After a few days of thinking about this off and on I remembered that back in the mid 1960s I'd done some silver soldering when I worked in aerospace in Milwaukee. When I was transferred to Kokomo in 1972 I brought a couple short pieces of silver solder rod with me. I recalled seeing them occasionally when searching for whatever in my desk. Here it is, 2009, over 37 years later...could they still be there? Well, actually yes they were.

We don't throw away anything do we? I retrieved the two pieces, one being about 6" long and the other about half that. The rods were about 1/8" wide, half that in thickness, straight as an arrow and virtually unbendable. The shorter piece was exactly the correct length although I could have trimmed it easily if need be. I tinned one end of the rod and also the remaining part of the dial mechanism that I described earlier. After cleaning they took solder readily. It took about 10 tries to get the correct angle so the pointer wouldn't scrape on the dial scale or the glass. I found some satin red Testor's paint at the local craft store and, after sliding a piece of waxed paper under the pointer so as not to ruin the dial scale, I applied two coats. I'm really pleased with the way it turned out.

My attempts to cut my own dial glass gleaned from a discarded picture frame resulted in several pieces for the recycling bin, so I had the 3" X 7 1/2" single weight glass made at the local glass shop. The shop owner gave it to me after I described to him why I wanted such a little piece of glass. Nice guy. Look at all the time and bother I went through just to satisfy my DIY urge and without success at that. The glass fit perfectly after some very careful metal bending in order to slide it in place. I couldn't determine how the glass was mounted at the factory without what looked to be a big tear apart. I worried about bending the metal glass retainer back in place without damaging something but it bent back in place "close enough"...I held my breath....wheew!

There are two loop antennas on this radio. One is a small, 7.5" diameter, edge wound, 18 turn loop for the broadcast band that can be capacitively trimmed for optimum performance. Motorola called it their "Aero Vane" antenna. It is attached vertically to the inside wall of the cabinet. I dusted it off and replaced the four leads on the interconnect cable and stabilized some loose turns with Q-dope. The second loop, for the shortwave band, consisted of two turns of DCC stranded wire stapled to the inside edges of the cabinet....a vulnerable location. It was in bad shape.

Continued on page 15

I replaced it with 2 turns (18') of DCC 20 gauge solid wire but routed it around more to the inside of the cabinet so it wouldn't be damaged by grabbing the back edges while moving the radio. The DCC wire was white and stuck out like a sore thumb so I dyed the wire black before I installed it to match the interior of the cabinet. The turns were held in place with black double backed carpet tape and then secured in about a dozen places with a clear, thick, somewhat gooey but flexible, KIWI shoe and boot patch "adhesive". Nice stuff!

Well, once all these preliminary steps were completed it was time to marry all the pieces together on the bench. In other words give it the smoke test. I plugged in the speaker, PB assembly and BC antenna, snapped the power switch on and it came alive. First I made a few quick DC measurements and all was OK. I always adjust the IFs and then check alignment. Both the BCST and SW band calibration needed tweaking. Each band had its own trimmer and padder. I ran out of adjustment room on the BCST padder (it had already been screwed down tight) so I added a small silver mica in parallel to give me some adjustment range. That was about all there was to it.



Figure 7

I checked the frequency at which each of the five PBs was tuned to get an idea to what stations my grandpa may have listened. There were no station ID tags on the PBs. Were they set up at the store for his favorite stations or set to the technician's favorites? Did he actually use the PBs? Aunt Ruth is in no condition now to remember, so that's that. I'll never know. Anyway, I used a signal generator to determine where they were set (approximately). They were WTMJ 620 and WISN 1130, Milwaukee, and WBBM 780, Chicago. Two PBs were right on the money, WGN 720, Chicago and WLIP 1050, Kenosha...Grandpa's favorite. WGN is very strong in my locality but I can't pick up the Kenosha station. I kept WGN but retuned the other four to central Indiana stations.

I brought all the components to the basement and then, with help from my wife, Shirley, we carried the cabinet down the stairs. Everything installed in the cabinet with no problem. The original knobs and PBs aren't in too good condition but I'm using them anyway (*Fig 7*).

Grandpa's radio graces my basement "museum" in a corner dedicated to the memories of my parents and grandparents. At this time you'll find Grandpa's radio, Grandma's rocker dating from 1877 (it has a caned seat and back), a brass floor lamp belonging to my parents from the time of their marriage in 1928 and a small braided rug my mother made that lies in front of the rocker. Nearby is a restored Majestic 70 just like the first radio my parents owned and the one I listened to all those kids adventure programs that originated out of station WXYZ Detroit. I had re-caned that old rocker for my Mother in 1974 and Shirley and I restored the brass floor lamp about two years ago. Planned for the near future are framed photos and other memorabilia to be placed on the wall behind the chair and radio, including the sheet music for the song "Little Man You've Had A Busy Day" dated July 12, 1934. It's the song my dear mother used to sing to me when I was between the ages of 2 to 5. I'll never forget it and I can hardly read the words without choking up.

Now I listen to my favorite AM stations when I'm downstairs here in my little inner sanctum. I did a station count at 9:00 AM one morning and logged at least 35 listenable stations with the radio in the basement and no external antenna. Yes, I have listened to "The Lutheran Hour" at least once, just as grandpa had in the past.

Classified Ads

Remember that classified ads up to about 1/4 page are free to WARCI members

The cut-off date is the 15th of the month prior to the publication. Example(The July 2017 Issue means articles have to be to me by 15 June). Send ads by email or mail

To: Mike Sajdowitz, WARCI Editor, W220 N2716 Maplewood Ln, Waukesha, WI
53186 or msajdowitz1@gmail.com

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 1-608-658-6107.

Training - Michael Lewis 6070 County Rd. D, or Oregon, WI 53575 Phone:608-835-7193, email: deepheart@att.net

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 8hr blocks of bench time. You will have access to DMM's, digital audio and RF generators, capacitor and indoor 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, and ceramics; electronics from 25 WVDC to 450 WVDC. Tubes are available to my students as well as technical literature including a Ryder, Beltman, and Gernsback manuals, factory manuals, and Sam's Photofacts. Whether you never soldered before, or regularly restore radios & are stuck on a "tough dog" chances are I can help.

For Sale - Ben D.

Orola wind-up phonograph. Located in Mount pleasant, WI. The phonograph was made by General Mfg. Corp in Milwaukee, WI in the 1920's. His name plate that says "With a toneas rich as gold". Looking for best offer. If interested in the item, Call Ben at 262 412-9112 or Mike Piering at 262 344-3302

For Sale - 1938 Zenith 9-S-262 shutter dial console radio. The radio has been recapped and restored electrically. The chassis is clean. The cabinet has been partially refinished and has all its original knobs. \$700 invested, asking \$725. Located in Mount Pleasant, WI. For more information, contact Ben at 262 412-9112 or Mike Piering at 262 344-3302.

Badger Consignment

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Badger consignment is an eBay consignment dealer with 12 years, experience specializing in high and antique tube radios and hi-fi tube audio equipment (i.e. tube amps, preamps, receivers, tuners, and much more).

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

Classified Ads



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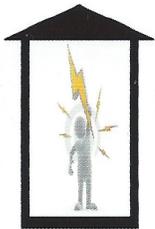
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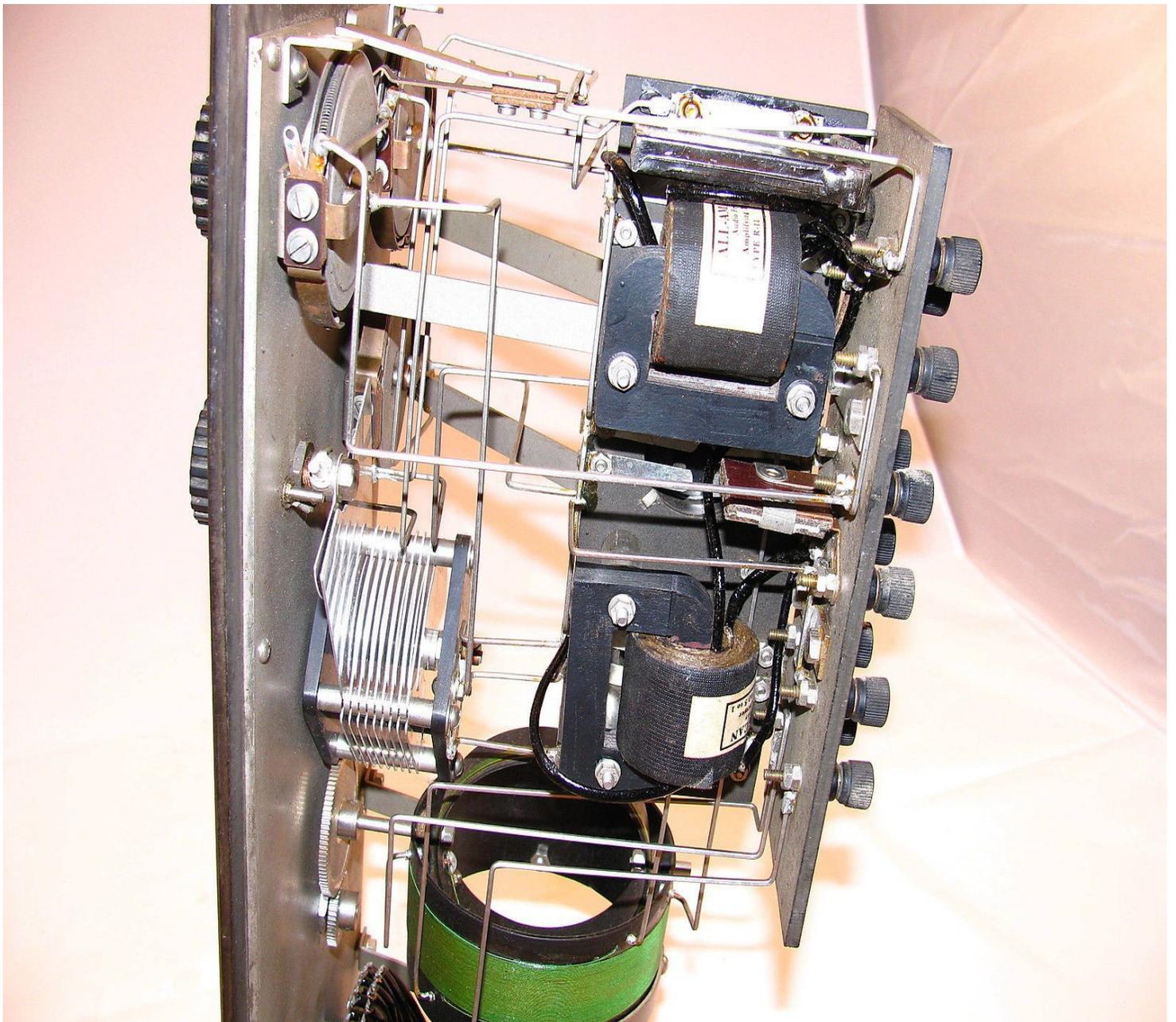
Classified Ads

Wanted By: Phillip Drexler

Phone: 1-651-236-5330

Email: ux201a@yahoo.com

Klitzken model 125 detector amplifier. Please see page 170 of vol. 2 of "Radio Manufacturers of the 1920's" by A. Douglas for a picture. Two type R-11 (five to one ratio) All American open frame Audio transformers.



CLASSIFIED ADS

This page contains classified ads from recent articles of WARCI News, the club newsletter. Classified ads are free up to 1/4 page for WARCI members. Classifieds will also be posted online on a regular basis.

The cut-off date for all newsletter material is the first of the month preceding publication of the next newsletter (e.g. April 1st for the May issue). Ads may be emailed to

webmaster@warci.org.

WARCI Radio Services

The following is a list of WARCI members willing to provide repair/restoration services, advice, or research.

Name	Location (WI)	Email	Telephone	Service(s) Available
Dwight Church	West Allis	(none)	414-545-6972	Radio repair – electronics only.
Bill Engaas	Menominee Falls	craftyradioBK@yahoo.com	262-786-8183	Speaker repair.
Mike	Oregon	deepheart@att.net	608-835-7193	Training.
Ben Bensaid	Elkhorn	RegalSound Design@gmail.com	262-581-5453	Repair and restoration.
Bill Callaway	Antigo	pitboxer3@live.com	715-623-2565	Repair – all vintage electronics.

Classified Ads

WANTED: by Dale Boyce, Email: radioman@wi.rr.com, 414 840-4146

1. Briggs & Stratton Corporation, Milwaukee, WI (BASCO) radio equipment from 1922- 1937. Catalogs, complete or incomplete crystal radios, tube type radios, radio frequency transformers, earphones, tube sockets, crystal detectors, vernier rheostats, fixed resistors, multi-plate variable condensers, fixed capacitors, literature, advertising, parts boxes, battery eliminators (radio power units types "A", "B", "A+B"), push button tuners, promotional items etc. Please check your boxes of radio parts and your literature files. Also wanted: radios such as globe electric, Munro McKillip and others which utilize Basco radio parts.
2. 1920s tube type radios, amplifiers and radio parts boxes, advertising, promotional items, etc. made by Allen Bradley company, Milwaukee Wisconsin.
3. 1920s Crystal radios, tube-type radios, advertising and promotional items made by Sunlight Radio, Milwaukee Wisconsin.
4. 1920s Julius Andrae and Sons Co (JASCO) Crystal radios, radio catalogs, radio equipment and promotional items made by Andrae Electric, Milwaukee, Wisconsin.
5. 1920s horn and cone tape radio speakers made by Milwaukee companies including G&G radio company, GEMCO Granolite art products, Yar-Lange, and others.
6. Individual and boxed sets of 1920s Brightson blue radio tubes distributed by Yahr-Lange, Milwaukee, Wisconsin.

WANTED: Parts and Literature: Glenn Trischan 414 357-7024, gnets142@att.net, P.O. Box 240022, Milwaukee, WI 53224

- Cylindrical Federal #35 RF transformer or similar, 3/8" L x 1 1/8" diameter, to studs/nuts on each end;
- Centralab catalogs from 1960s - 1980s. Central Radio Laboratories/Centralab parts 1920s - 1980s;
- Catalogs/literature/photos of any age from Marsh Radio/Electronics in Milwaukee;
- JMP Products or literature including Submariner and wave meter;
- Set of concentric tuning knobs for Crosley model 725 or clear photo of same;
- Set of Shortwave & Television Laboratories, Boston, 4 pin coil set (red, blue/black, brown, green) or individual coils;
- Always seeking Wisconsin made radios, especially Global Electric, Advanced Electric, and Fidelity/New England Mills;

WANTED: Parts: Carl Zimm, beampowered-tetrode@yahoo.com

- Volume brass bezel for Zenith 701, 8" speaker for Philco 20, Crosley 59 chassis for Oracle, AK 80 or 90 chassis.
- For sale; McMurdo- Silver amp for Masterpiece

Advertise with WARCI

Adds up to 1/4 page may be placed in the WARCI news free of charge for WARCI members

Ads larger than a quarter page are available at the rates outlined below:

1/4 Page free (members only) 1/2 page \$15/issue/\$60/year (5 Issues)

Full Page \$25/Issue, \$110/year (5 Issues)

ONLINE ADS

FOR SALE: Full set of Rider's manuals for sale. Accepting offers.

For more info call Frank Prince 262-639-9307.

FOR SALE: Grandfather clock radio, serviced and working great. Radio can be viewed on YouTube here: <https://youtu.be/Y1RTGBiCl-s> If interested, make an offer. Call Frank Prince 262-639-9307.

FOR SALE: Orola wind-up phonograph. Located in Mount Pleasant, WI. The phonograph was made by General Mfg. Corp in Milwaukee, WI in the 1920s. Has nameplate that says "With a tone as rich as gold." Looking for best offer. If you're interested in the item, call Ben at 262-412-9112 or Mike Piering at (262)344-3302.

FOR SALE: 1938 Zenith 9-S-262 Shutterdial console radio. The radio has been recapped and re-stored electrically. The chassis is clean. The cabinet has been partially refinished and has all of its original knobs. \$700 invested, asking \$725. Located in Mount Pleasant, WI. For more information, contact Ben at (262)412-9112 or Mike Piering at (262)344-3302.

FOR SALE: Zenith Walton 7-S-232

- Replaced all electrolytic and paper capacitors.
- Replaced about 1/4 of the resistors, including the 1Meg in the eye tube socket.
- Replace the speaker wires.
- Cleaned and greased the shutter mechanism. Replaces the felt pads in the mechanism as well.
- Replaced the rubber around the edge of the dial glass.
- Replaced the rubber chassis mounts
- Replaced wrong grille cloth with reproduction.
- Case was restored by Guaranteed Furniture Repair in Berkley, MI. Polyurethane finish was stripped. Toning was restored around the grille. It was coated with satin finish nitrocellulose lacquer.
- Painted the interior with black nitrocellulose lacquer.
- \$3200. Call Frank at 262-639-9307. <http://youtube.com/zenithwalton>

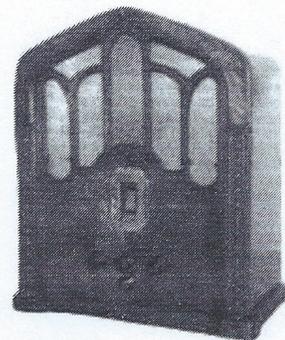
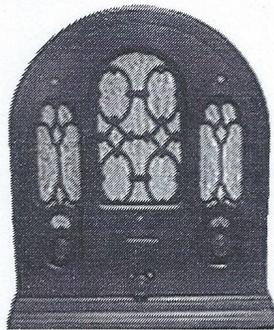
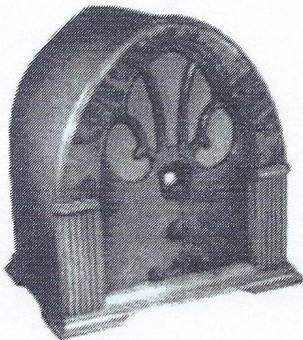
FOR SALE: 1937 Philco 37-116X console radio. Restored, asking \$275. or more info call Frank Prince 262-639-9307. <https://youtube.com/philco37-116x>

WANTED: RCA 110K or 111K console radio, also interested in 1970's LED watches. Call Frank Prince 262-639-9307



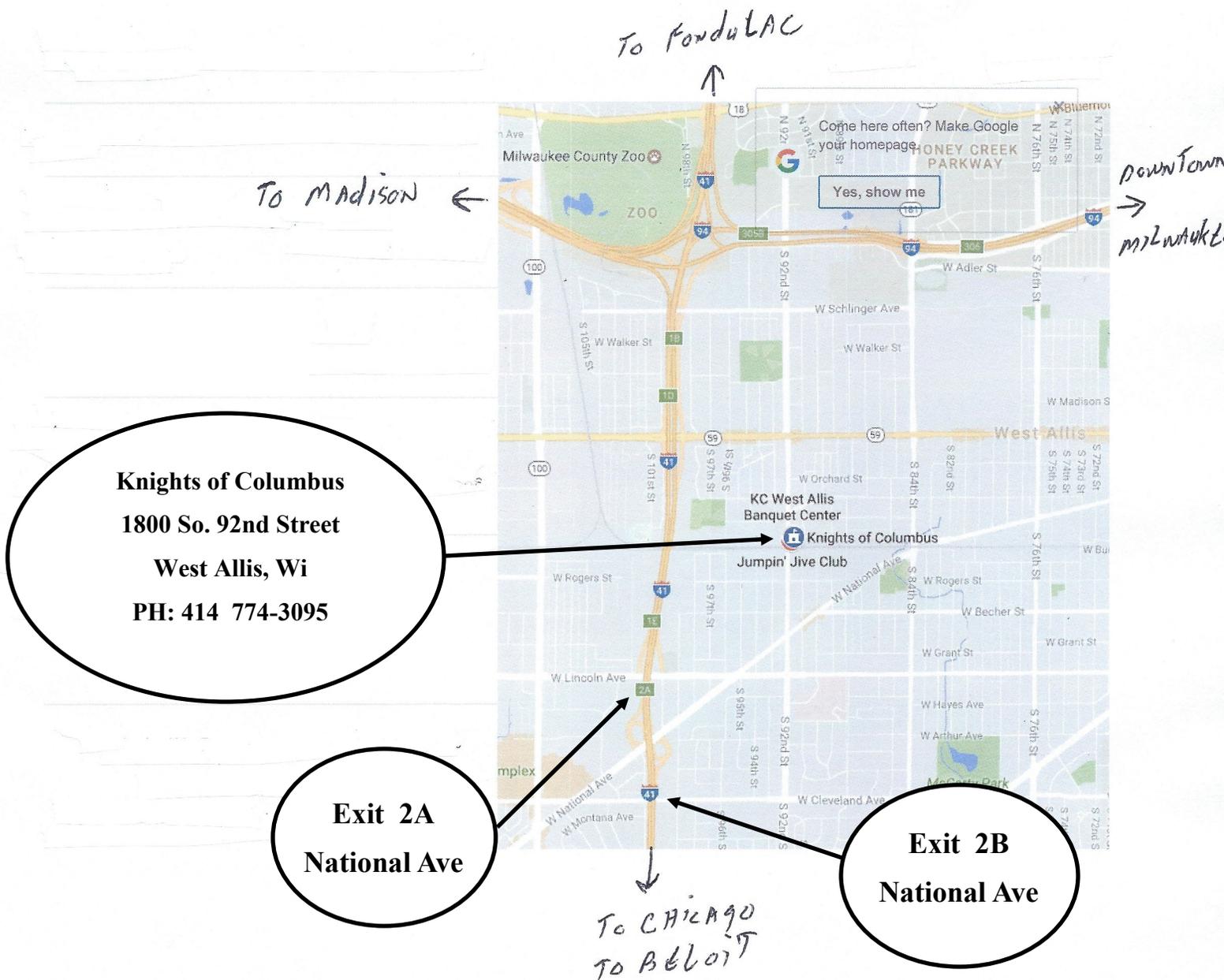
The **Wisconsin Antique Radio Club**
Will hold their next swap meet on January 21 at Knights of Columbus, 1800 S. 92nd Street, West Allis, WI 53214

The weather may be nasty but we'll get there any way we can.



Free Admission. Selling spaces are \$7 for members and \$10 for non-members. The doors open at 7 for setup, selling starts at 8. Donation auction and free pizza will be at about 11. Come early for the best selection and stay to meet fellow collectors





1. If traveling south from Fond du Lac, at the Zoo interchange connect to I-894 south to Chicago.
2. Exit 2A National Avenue. At the stop lights turn left onto National Avenue to 92nd street.
3. Turn left on 92nd street and go 3 1/2 blocks to Knights of Columbus on the right hand side.

1. If traveling north on I-43 from Beloit or I-94 from Chicago, connect to I-894 West to Madison or Fond du Lac.
2. Exit 2B National Avenue. At stop lights turn right to 92nd street.
3. Turn left on 92nd street and go 3 1/2 blocks to Knights of Columbus on the right hand side.

1. If traveling from downtown Milwaukee on I-94 West to Madison, get off on Exit 306/ 84th Street.
2. Turn left on 84th street to Greenfield Avenue. Turn right on Greenfield Avenue to 92nd Street.
3. Turn left on 92nd street and travel 2 1/2 blocks to Knights of Columbus on the left hand side.