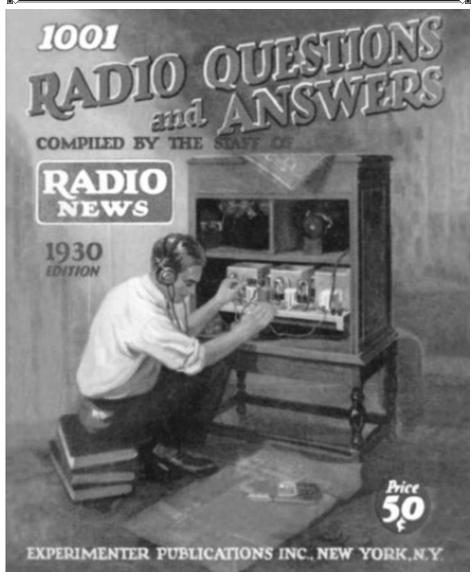


ARCI NEWS

www.antique-radios.org

Affiliated AWA
Antique Wireless Association

Volume 34, Issue 2 April 2015



ANSWERS TO YOUR *RADIOFEST 2015* **QUESTIONS ARE INSIDE!**

UPCOMING INDOOR/OUTDOOR MEET APRIL 19, 2015

AMERICAN LEGION HALL

570 South Gary Avenue, Carol Stream, IL

APRIL 19, $2015 \sim 7AM - 11AM$

Outdoor If Warm / Indoor If Cold or Raining

Peoples' Choice Contest: Awards For 1st, 2nd, 3rd Place Business Meeting 9:30 am

Boy Scout Pancake Breakfast / Free Coffee, Juice & Cookies 50/50 Cash Drawing Raffle



2015 ARCI MEET SCHEDULE

April 19, 2015	7AM-11AM Outdoor Swap Meet Inside Business Meeting 9:30AM	American Legion Hall Carol Stream, IL (See Map)
June 21, 2015	Outdoor - Gates Open 7AM Combined Meet With 6-Meter Club of Chicago	DuPage County Fairgrounds Wheaton, IL (See Advance Ticket Form & Map)
July 31- August 2, 2015	RADIOFEST	Quality Inn Burr Ridge, IL (See Map)
October 4, 2015	7AM-11AM Outdoor Swap Meet Business Mtg./Officer Election 10AM	American Legion Hall Carol Stream, IL (See Map)
December 6, 2015	7AM-11AM Indoor Swap Meet Business Meeting 10AM	American Legion Hall Carol Stream, IL (See Map)

PRESIDENT'S MESSAGE

Happy Spring to my fellow ARCI members! As I am writing this column, my calendar is telling me that we have just passed over the threshold of astronomical spring, while a quick glance out the window tells me that Chicago has not quite gotten the message. It has been snowing quite impressively up here in the northern suburbs. Well, sooner or later the sun will have to win out, and the snow will melt away. Hopefully that will happen in time for our April 19 meet. Keep your fingers crossed!

It was great to see a strong turnout of buyers and sellers at the February meet in Carol Stream. This is traditionally one of the smaller ARCI meets, but we still had 17 seller tables one more than last year - with lots of great items on display looking to find new homes. Our donation auction featured its usual eclectic mix, including PA gear, test equipment, and the obligatory "beater" radio sets that are a great source of parts, or for that epic restoration project you've been dreaming of doing. The donation auction and raffles combined added over \$200 to the club's coffers. Much appreciated. And Dan Schoo, as usual, has done a great job of chronicling our meet in photos; some of which are posted in these pages, or check them all out "in living color" on our ARCI website. Thanks to everyone who made the effort to participate, despite it being a dark, dreary Sunday in February.

It goes without saying that the February business meeting was laser-focused on *Radiofest 2015*. Rest assured, your club officers have been going over every detail with a "fine tooth comb" to make this as successful and enjoyable an event as possible. Please take the time to read through all the various sections in the *RADIOFEST PLANNING UPDATE* section in this edition of the *ARCI NEWS*. There you'll be able to learn many important details, and see the changes that have taken place. And don't forget about the venue change! Maps to the new *Radiofest* hotel are provided in these pages. Hotel room reservations are also now open. Get your reservations early, to book the type of room you prefer, and to get the special ARCI rate.

Radiofest 2015 will commemorate the Zenith Radio Company with a special equipment display, and a presentation devoted to early Zenith radios by the author of a brand new book on the subject. It has been quite a while since ARCI last featured Zenith at Radiofest. Given the tremendous enduring popularity of the company and its products, we thought that this would be a great time to bring it back for an encore. I know the name Zenith holds a very special place in the hearts and minds of many ARCI members. Who of us doesn't have at least a few Zenith radios in our collections? But beyond the products, Zenith also played a major role in the lives of many who lived and worked in the Chicago area during its heyday. The company employed thousands of people in Chicago, and generated many more jobs for sub-suppliers of parts and services to the company. How many of us have relatives or acquaintances that worked at Zenith? My boss when I worked at Sony came from Zenith engineering, and my wife's aunt worked at the Austin Avenue plant for over 20 years. I am sure that many of you have your own stories to tell. So let's share them at Radiofest 2015. And if you have any Zenith related items in your collection you would like to display at Radiofest, please remember to fill out and submit the Special Equipment Display registration form available in this issue or online.

Our next meet is Sunday, April 19, 2015 at the American Legion Hall in Carol Stream (570 South Gary Avenue, just south of North Avenue Route 64). We look forward to seeing everyone there. Weather permitting; this will be our first outdoor meet of the year. What can be more enjoyable than a radio meet on a fresh spring day? But even if Chicago's fickle spring weather intrudes with rain, cold, or, (God forbid) snow, we can always move the festivities indoors. So, there is no excuse not to come!

See You At The Next Meet, John Stone ARCI PRESIDENT

ARCI UPDATE

The President's Column -- All The News That's Fit To Print

RADIOFEST SPONSORSHIPS

It is not too late to participate in our ARCI Corporate Sponsorship program and our Member-Sponsor program for *Radiofest*. The *Radiofest* brochures and other *Radiofest* advertising will be printed in May. We encourage all our members to participate. *Radiofest* and other ARCI announcements directly reach almost 20,000 targeted readers with interests in historical and technical subjects. This is a great opportunity to take advantage of inexpensive advertising to a targeted audience while providing substantial assistance to our club. Please contact John Stone at arcipresident@comcast.net or Art Bilski at myantiqueradio@myantiqueradio.com by May 1, 2015 with any ideas or suggestions for new sponsors interested in discussing arrangements with ARCI.

RADIOFEST SPONSOR-MEMBERS

ARCI is again offering "Sponsor-Members" status to members who are dedicated to assuring the financial strength of *Radiofest*. Members who feel they are able to contribute \$25, \$50, \$100 or more to the sponsorship fund may do so. Sponsor-Members will be listed in *ARCI NEWS* (but not the amount of contribution), and recognized as a group at the banquet, along with a certificate. I am aware of a number of organizations that regularly produce events similar in size to *Radiofest*. Member-Sponsors help to provide the "emergency backing". You, as a member, are invited to help and participate as you see fit. Funds given by cash-in-person or check identified as "Member-Sponsor Fund" should go directly to our treasurer Rudy Hecker. If you have any questions or comments, please email John Stone at arcipresident@comcast.net.

RADIOFEST VOLUNTEERS NEEDED

Radiofest's flea market, speaker programs, contests, auction, and displays are all made possible through the tireless efforts of a dedicated group of volunteers who have generously donated their time and talents to this wonderful event. But, we could really use some extra help from you. If you have some time available on Friday evening to help out with the auction, or on Saturday during the day to lend a hand at the flea market, please consider volunteering to help us out. If you're available and would like to help us out, please contact John Stone at arcipresident@comcast.net.



Jack Iverson.

HEALTH & WELFARE

We regret to report the passing of Jack Iverson on March 9. If you have been around ARCI for any length of time you knew Jack Iverson. The family will be having a celebration of Jack's life as per his request. It will probably be in early May with more information to follow. No other information is available at this time.

We wish all the best to Olin Shuler, past ARCI President, on his continued recovery from triple bypass surgery in early March. At Olin's request, the news remained private until this newsletter. Olin is doing well and is recuperating at home. Olin plans to see everyone at ARCI in June. Email and other correspondence are welcome.

We also wish Julia Bart all the best on her recovery from nerve and muscle surgery in her right arm in mid-March. She is also home and doing well. We will see also Julia at ARCI in June.

REGISTER EARLY FOR JUNE HAMFEST COMBINED MEET WITH SIX METER CLUB

The June ARCI swap meet will be a joint event with the Six Meter Club of Chicago on Sunday, June 21, 2015 at the DuPage County Fairgrounds, 2015 Manchester Rd., in Wheaton - just a bit south and west of our ARCI meets at the American Legion in Carol Stream. Last year more than 1,200 radio enthusiasts and hams from 16 states and even two visitors from Japan participated in the giant flea market and other events, including many ARCI members who were able to park in a special area designated as ARCI Swap Row.

We will have displays from AMSAT, ARRL, NWS/Skywarn and dealer displays. And, the Midwest Classic Radio Net's Hamboree will be back with us again. MCRN is a gathering of hams that operate "boat anchor" equipment on a weekly 3885 kHz AM net.





Everyone MUST have a Hamfest ticket to attend. Tickets are still only \$6 in advance, or \$8 at the gate. There is no charge for outdoor flea market space - please see the registration form for information. Jim Novak will have advance tickets at our April 19th ARCI meet. As usual, ARCI will have its donation auction at 10 am along with the 50-50 drawing. In addition, if you deposit your Hamfest ticket stubs in the drum near the stage in Building 2, you have a chance to win many other prizes including \$300, \$200 and \$100 cash.

Indoor flea market sellers and commercial dealers will be in Buildings 2, 3 and 4 with the outdoor flea market to the east of the Exhibition Hall building and extending north along the east side of the fairgrounds. All traffic will enter and exit through gate S-7 located east of the main exhibition hall. For ham operators, station K9ONA will be on the air, serving as a talk-in station on two meter FM, 146.52 simplex and through the 146.37/97 repeater (107.2 Hz tone). Food, coffee and soda will be available from the Romeoville Knights of Columbus.

For anyone wishing to take an FCC Amateur Radio license exam, testing will be held from 9 to 11 am.

The Hamfest opens to the general public at 7 am (buildings at 8 am), but ARCI members who are willing to help direct traffic for parking – we will need help keeping ARCI Swap Row open for members – can enter at 6 a.m. providing you have an advance ticket and can show positive ARCI ID (your current membership card). You can then pick out your favorite flea market parking space and lend a hand for a few minutes when the gates open at 7. We could also use some help Saturday afternoon after 2 pm setting up signs, the PA system, tables, etc.

Anyone who can help out or who needs advance tickets or more information can call Jim Novak at 708-442-4961 or email WA9FIH@aol.com.

HAM RADIO AND ELECTRONIC FLEA MARKET

Also featuring Antique and Vintage Radios - now Bigger and Better than ever!

SIX METER CLUB OF CHICAGO 58th ANNUAL



HAMFEST

and Antique Radio Club of Illinois Swap Meet plus Midwest Classic Radio Net Hamboree!

Sunday, June 21, 2015

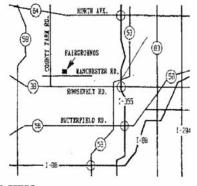


DuPage County Fairgrounds, Wheaton, Illinois

2015 Manchester Road (North of Roosevelt Rd. [Rte. 38], East of County Farm Rd. GPS COORDINATES: N41.866667, W-88.132989

GATES AND FLEA MARKET OPEN 7 A.M. BUILDINGS OPEN TO PUBLIC 8 A.M.

- All Weather, Large Outdoor Flea Market AND More than 20,000 square feet of indoor selling space for those who prefer to be inside
- AMSAT, ARRL, NWS/Skywarn and Dealer Displays
- Good Food and Refreshments at Reasonable Prices
- Free Parking no extra charge for outdoor space
- Donation Auction at 11 a.m. Proceeds to ARCI (Radios, Test Eqpt., Parts Only – NO PCs)
- Overnight RV Parking w/110 V hookup -- must Register in Advance!
- 1st \$300, 2nd \$200, 3rd \$100 awarded at 1 p.m.
- TICKETS: Advance \$6.00; At Gate \$8.00 Use form below to order advance tickets.
- · ARRL VE Testing 9-11 a.m. \$15 Exam Fee
- ARRL Awards QSL Card Checking 9-11 a.m.
- TALKIN: K90NA 146.52, K90NA/R 146.37/97 (107.2)
- ALL TRAFFIC ENTER GATE S-7 EAST OF BUILDING
- INFORMATION: E-Mail <u>WD9GJK@arrl.net</u> or call our 24 Hour InfoLine – (708)442-4961.



VISIT OUR WEB SITES:

SIX METER CLUB OF CHICAGO: www.k9ona.com
ANTIQUE RADIO CLUB OF ILLINOIS; www.antique-radios.org
MIDWEST CLASSIC RADIO NET: www.mcrn.tripod.com

PLEASE NOTE: ABSOLUTELY NO ALCOHOLIC BEVERAGES PERMITTED

NO SALE OF FOOD OR BEVERAGES IN FLEA MARKET -- All Sellers Responsible for Cleanup of Their Spaces!

Return with check payable to "Six Meter Club of Chicago" and <u>Self-Addressed</u>, <u>Stamped Envelope</u> to: Six Meter Club of Chicago, 3532 Raymond Avenue, Brookfield IL 60513-1204 <u>no later than June 4, 2015</u>.

Please send Tickets/Reservations as follows:

ADVANCE TICKETS (every attendee age 12 and over)......#

© \$6.00 ea. = \$

RADIOFEST 2015 PLANNING UPDATE

NEW SCHEDULE: FRIDAY-SUNDAY

RADIOFEST 2015 IS COMING! Reserve the dates of July 31st, August 1st and 2nd. We shifted the show schedule from Thursday-Saturday over to Friday–Sunday. This was done for many reasons primarily for the ability to host our banquet on a Saturday night (previously not available), and many requests to utilize weekend rather than weekday time for the show. The program schedule remains the same, i.e. opening with the auction, a full day of activities, and a closing morning.

We are at a <u>new location</u> this year at the <u>Quality Inn in Burr Ridge</u>. The Willowbrook Inn and Conference Center is still under reconstruction, and we had an opportunity to move the show to keep costs down. See below for more information about the hotel.

Get ready as we plan another banner year, and team up with the Wisconsin Antique Radio Club, Inc. (WARCI), the Vintage Radio and Phonograph Society (VRPS) of Dallas, Texas and the Antique Wireless Association (AWA). *Radiofest* will be cosponsored by four important clubs, making it truly THE national event of the summer!

AFTER CAREFUL CONSIDERATION, WE ARE PLEASED TO ANNOUNCE THERE WILL BE NO INCREASE IN DUES, SWAP MEET SELLING SPACE, OR AUCTION FEES. Dues: \$25. First selling space: \$45 Pre-registered, \$50 on site registered. Additional selling spaces: \$25 Pre-registered, \$35 on site. Table rental; (8 ft) pre-registered only, \$15. One-day single space: Saturday, \$30.

Special Notice: The entertainment at the <u>Saturday Night</u> banquet will feature a performance by the *Those Were The Days Radio Players*. Come and enjoy! Banquet tickets are priced at \$45 per person, or 2 for \$85.

This year *Radiofest 2015* will commemorate Zenith Radio Company. Zenith, from Chicago, was a worldwide leader in radio and television technology. A special display will feature hardware and memorabilia from this legendary company. We invite all those interested in participating to bring their finest examples to share in the display.

This year's contest categories are: Radios Pre-1930, Radios Pre-WWII (to 1945), Radios Post-WWII (1946 & later), Advertising / Premiums, Catalin & Rare Plastic Radios, Transistor and Novelty Radios, Speakers, Vacuum Tube Audio, Radios Made In the Midwest, and Open.

The opening night auction will be in the hotel's Aria Ballroom. The large quantity and excellent quality of items available in the auction make this a "must attend" event. You never know what you'll find here, including rare and highly collectible items. Jim Sargent from VRPS is returning to co-manage the auction.

Radiofest 2015 speaker's programs will feature four sessions, with a break during the noon hour. Currently, our planned topics include: Collection Preservation, Early Zenith Radios, WWII POW radios, and Vintage Audio Gear.

The Donation Auction is scheduled for Sunday morning. We need your donations, which benefit the club by helping to offset operating expenses. Thanks to our members who have helped so much in years past. -- And remember, *Radiofest* is your show!! We are always looking for suggestions on ways to improve it. If you have a good idea, please contact John Stone at arcipresident@comcast.net.



ARCI Membership (\$25.00)

(If not currently a member)

RADIOFEST



July 31 thru August 2nd, 2015

Quality Inn Burr Ridge ~ 300 S. Frontage Rd, Burr Ridge, Illinois (630) 325-3900

All hotel reservations must be made directly with the Quality Inn Discounted Hotel rates for ARCI members begin at \$79.00

One Day Single Space Rate

Sunday Only (\$30.00)

RADIOFEST Will Feature a Large Radio Swap Meet, Radio Contest, Informational Presentations, Appraisal Tent & Auctions. Also the banquet returns with entertainment and awards

Events and Schedule subject to change. Watch our website for updates at: www.antique-radios.org

All sellers must be members of ARCI - NO ADMISSION CHARGE FOR NON-SELLERS

First Selling Space 5	Banquet (Inree Corse Meal) and Snow	
\$45.00 Pre-Registration	Herb Roasted Prime Rib	
\$50.00 On Site Registration	# Attending times \$45.00 = \$	
Additional Spaces	Chicken Marsala	
\$25.00 Each Pre-Registration	# Attending times \$45.00 = \$	
\$35.00 Each On Site Registration	Roast Sirloin of Beef Au Jus	
# times \$25.00 or \$35.00 = \$	# Attending times \$45.00 = \$	
Table Rentals-Pre-registration only	Vegetarian Lasagna Alfredo	
8 ft. # times \$12.00 = \$	# Attending times \$45.00 = \$	
	Less discount (2 for \$85.00) = \$	
6 ft. # times \$ 8.00 = \$		
Please check here if you are buying or sellers	TOTAL OF ALL \$	
space just to reserve a parking space so that we can		
keep all sellers grouped together. Thank you!	L I Special Resource By Sallow And Name	
NAME:	Special Requests By Sellers And Names Special Requests By Sellers And Names	
ADDRESS:	of Guests With Banquet Selections	
PHONE # DAY: EVENING:		
E-MAIL: APPLICATION DATE:		
ATTENDED ATTENDED		
EMERGENCY CONTACT NAME:	PHONE:	
In order to mail out your confirmation and parking/selling location prior to RADIOFEST we must receive your In order to mail out your confirmation and parking/selling location prior to RADIOFEST we must receive your registration on or before July 10, 2015. Registrations received after that date will need to be picked up at the registration booth at the show. Parking and selling locations will be assigned by ARCI Have Questions or need more information? Check our website at www.antique-radios.org or send e-mail to clubinfo@antique-radios.org		
FOR OFFICIAL USE ONLY		
11		
Date Received Registration #	Check # Spaces	
~ 8 ~		

RADIOFEST HOTEL — NEW LOCATION

Radiofest 2015 has relocated to the Quality Inn & Conference Center in Burr Ridge

(One exit east on I-55 from the former location at the Willowbrook Inn & Conference Center.)

Radiofest remains close to both Chicago airports (20 miles from O'Hare and 15 miles from Midway). Hotel reservations for July 31 - August 2, 2015 must be made directly with the Quality Inn & Conference Center. The hotel is offering discounted rates for radio show attendees starting at \$79.00 for standard rooms, and \$89.00 for

RADIOFEST 2015 FEES

Selling Spaces – 1st \$45.00 Pre-registration, \$50.00 On site registration;

Additional Spaces \$35.00; Sunday Only \$30.00

Banquet – \$40.00 each; \$75.00 per couple

8' TABLE RENTALS – \$12.00 each 6' TABLE RENTALS – \$8.00 each Only through pre-registration

deluxe rooms. You must mention ARCI to get the discounted rate. Last year there was some confusion with the national booking service about room rates, so we recommend calling the hotel directly. We strongly recommend that you make your reservations early. Last year the hotel sold out.

RADIOFEST 2015 PRELIMINARY SCHEDULE

FRIDAY (7/31)

Pre-Registration Available After 5pm Main Auction at 6:30pm (Main Ballroom) Free Pizza Party After Auction

SATURDAY (8/1)

7am Registration / Radiofest Opens Flea Market All Day Special Event Ham Radio Station - All Day Educational Programs (TBA) Ladies Luncheon (Restaurant) Old Equipment Contest (TBA) Banquet & Entertainment (Aria Ballroom)

SUNDAY (8/2)

Free Seller's Raffle at 9:15am Donation Auction at 9:30 am Flea Market Until Noon

RADIOFEST 2015 SPECIAL EQUIPMENT DISPLAY

ZENITH RADIO COMPANY

Commemorate the history of this legendary radio company from Chicago. If you have an item you wish to display, please fill out the form in this issue.

RADIOFEST 2015

PRELIMINARY PROGRAMS (As of March)

RADIOFEST PROGRAM PLANNING IS IN PROGRESS PRELIMINARY TOPICS INCLUDE:

Zenith: The Early Years WWII Era POW Radios Vacuum Tube Audio Panel Radio Collection Preservation

RADIO REPAIR (Location TBD)

THE RADIO CLINIC

Ed Huether

An informal radio clinic from around 9:00 AM continuing as long as there is interest. Ed will cover radio repair topics (e.g. trouble-shooting, alignment). He will also be very open to questions, and people can bring in a radio they are trying to fix to ask about it.

RADIOFEST 2015 CONTEST CATEGORIES

With Awards For:

Dr. and Mrs. Ralph Muchow "Best Of Show" Award People's Choice Award Chairman's Trophy; Best Restoration; Best Historical Display

1st, 2nd, 3rd Per Category

Radios Pre-1930 Radios Pre-WWII (to 1945) Radios Post-WWII (1946 & later) Advertising / Premiums Catalin & Rare Plastic Radios Transistor & Novelty Radios Speakers Vacuum Tube Audio Radios Made In The Midwest

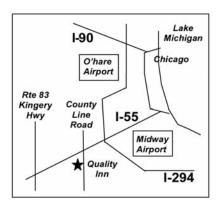
Open

Quality Inn & Conference Center

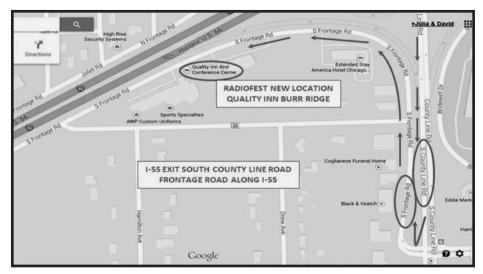
Quality Inn & Conference Center Reservations: (630) 325-2900 300 S Frontage Rd Hotel Fax: (630) 325-8907

Burr Ridge, IL 60527

Check-In: 3:00 PM -- Check-Out: 12:00 PM







SPECIAL RADIOFEST DISPLAY

By John Stone

ZENITH RADIO COMPANY

This year we are celebrating Zenith Radio Company and we invite you to participate in our special display theme for *Radiofest 2015*. ARCI members are invited to bring one or several pieces of equipment for display, but MUST preregister to avoid duplication of entries in the limited space available.

We will have a display of any and all Zenith related items. We are looking for your contributions such as:

- Chicago Radio Laboratories (the original Zenith company)
- Wireless and early radios through the 1930s including tabletop and console radios
- WWII era items, i.e. Transoceanic radios, military radios and other items
- 1950s-1970s era
- 1980s and related items from famous news stories and other events
- Any original documents and advertising items.

We would like to feature any items with newspaper or magazine articles and original equipment instructions, documentation and photos. The display is not limited to commercially produced items.

Please submit the *RADIOFEST 2015* SPECIAL DISPLAY REGISTRATION FORM which will be available at the April meet and is also downloadable from our ARCI website. Submit it to Keith Schreiter no later than June 15 for consideration by the committee. Our intent is to notify each applicant no later than July 4 regarding which items will be accepted for display.

NOTE: The Special Display is a special feature of *Radiofest* that operates in addition to the contest room. We invite our members to participate in both venues. Please email Keith Schreiter at: N9QDS@ARRL.NET if you would like to participate.



RADIOFEST 2015

SPECIAL DISPLAY AUGUST 1, 2015

REGISTRATION FORM APPLICATION DEADLINE JUNE 15, 2015

ZENITH RADIO COMPANY

AFTER REVIEWING THE CATEGORIES LISTED IN THE DISPLAY ANNOUNCEMENT, PLEASE LIST EACH ITEM THAT YOU WISH TO DISPLAY WITH BRIEF DESCRIPTIONS. WE INTEND TO HAVE THE DISPLAY ROOM OPEN FOR VISITORS BY SATURDAY AFTERNOON AT APPROXIMATELY 3PM WITH TAKEDOWN AFTER 10PM SATURDAY NIGHT. SUNDAY MORNING RETREIVAL OF ITEMS IS OPTIONAL BUT MUST BE PRE-ARRANGED. SECURITY WILL BE PRESENT AND THE ROOM WILL BE LOCKED DURING HOURS WHEN IT IS CLOSED TO PUBLIC VIEWING. WE ALSO NEED VOLUNTEERS WHO CAN ACT AS "DOCENTS" TO SPEND 30-60 MINUTES IN THE DISPLAY AREA ANSWERING QUESTIONS ABOUT THE DISPLAY.

ITEM(S) YOU WOULD LIKE TO DISPLAY:

NAME	CALL SIGN	
ADDRESS _		
PHONE (_)EMAIL	
SERVE AS DOCENT? (CIRCLE ONE) YES NO HOURS		
F	FOR INFORMATION PLEASE CONTACT KEITH SCHREITER AT:	

N9QDS@ARRL.NET, 847-265-6574, 351 CHERRY COVE LANE, ROUND LAKE BEACH, IL 60073

THE HISTORY ZONE

AN OCCASIONAL COLUMN ON HISTORICAL TOPICS OF INTEREST

By David Bart

ZENITH RADIO COMPANY

Zenith has a long and storied history. We briefly reintroduce some background about Zenith to encourage participation in the Zenith display at Radiofest.

Origins

Zenith was founded as "Chicago Radio Laboratory" (CRL) in 1919 by Ralph H.G. Mathews and Karl Hassel. CRL manufactured small quantities of wireless receivers primarily for radio amateurs. CRL's factory operated station 9ZN whose call letters later inspired the Zenith brand name (initially as Z-Nith). CRL manufactured under its valuable Armstrong regenerative receiver patent license that had been negotiated by Mathews in 1920.

CRL's meteoric rise began when businessman LCDR Eugene F. McDonald, Jr., who became wealthy from his pre-WWI automotive financing business, purchased one of CRL's radios at the end of 1920. McDonald instantly recognized the commercial potential of radio upon learning that an Armstrong license was necessary for success, and that no more licenses were being offered.

McDonald entered into partnership with Mathews and Hassel in 1921; bringing money, management expertise, and sales talent to CRL. Zenith was formally incorporated in 1923. During his reign, McDonald's autocratic and ruthless style earned him the title of "Commander."



LCDR Eugene F. McDonald, Jr.

The 1920s

During 1922-23, CRL relied on QRS Music Co., a piano roll manufacturer, to scale up its manufacturing. In 1924, the new Zenith Radio Corp. took control of its manufacturing and sales. Under McDonald's leadership, Zenith moved its manufacturing out of QRS to Zenith's own Chicago factory.

Zenith began making TRF receivers, called "Super Zenith" in 1924, and positioned itself as a high-end manufacturer throughout the 1920s. In 1924, Zenith introduced the industry's first portable radio, the "Companion." Zenith introduced the first mass-

produced AC-powered radio (model 27) in late 1926, and it introduced push-button tuning in 1927.

Zenith became the first company in the industry to acquire an RCA patent pool license in 1927, setting a trend for other major manufacturers that ushered in a two-decade long period of relative stability in the industry's patent licensing businesses. This period is often viewed as a time when RCA



Chicago Radio Laboratory/Zenith Radio Company Model 1-R circa 1922.

consolidated unfair monopoly power during which it exerted control through the licensing of its patents.

MacDonald, an adventurer at heart, accompanied explorer Donald B. MacMillan on an arctic expedition in 1923. Zenith radios accompanied the arctic expedition, allowing the explorers to remain in touch with civilization, and bringing significant free advertising and press attention to both Zenith and McDonald.

Zenith's famous slogan, "The Quality Goes In Before The Name Goes On," was first used in 1927.

The Peak Years

The stock market crash of 1929 and ensuing Great Depression caught Zenith ill-prepared with its line of expensive radios. Zenith responded by developing a low cost "Zenette" product line, and returned to profitability by 1933. Zenith subsequently returned to high-end designs, and the period 1935-1943 is viewed as the "high point" of Zenith's design prowess.



Zenith Stratosphere Dial.

The 1935 Z-1000 "Stratosphere," with its big black dial and "Split Second" pointer, would define Zenith radios for years to come. The 1936 line used the black dial extensively, and the 1937 line introduced another innovation - the "Robot Dial" or "shutter dial" system, in which mechanical shutters changed the appearance of the dial face when the band-switch was operated so that only one set of dial markings appeared at a time.

Zenith next introduced its detachable "Wavemagnet" loop antenna for use in portable radios beginning in 1941. In early 1942, Zenith brought out the first of its famous "Transoceanic" multiband portables. Production was interrupted beginning in April 1942 when manufacturing was converted to war needs.



Zenith Model 811 circa 1935.

Automobile and FM Radio

Zenith entered the automobile radio market in the 1930s with its Model 460, promoting the fact that it needed no separate generator or battery. Zenith was also an early proponent of FM, operating one of the first experimental stations in 1940 (WEFM named for Eugene F. McDonald), and it offered FM radios starting in 1942. WEFM was among the earliest FM multiplex stereo stations which first began broadcasting in stereo in June of 1961. The station was eventually sold in the early 1970s and is now WUSN. Zenith's FM stereo multiplex system is still in worldwide use today.

Television

The first Zenith television set appeared in 1939, with its first commercial sets entering the market in 1948. It continued to manufacture its round picture tubes and "porthole" TVs longer than other manufacturers for style branding reasons.

Zenith pioneered in the development of high-contrast and flat-face picture tubes and the industry's first 21-inch, three-electron-gun rectangular color picture tube as early as 1954. Thirty years later, it went on to introduce the MTS stereo system used on analog TV broadcasts in the U.S. and Canada, as opposed to the BBC-developed NICAM digital stereo sound system used for analog TV broadcasts that is used in many places around the world. Zenith even received an Emmy in 1986 for its pioneering work on development of MTS stereo TV.



Time Magazine Ad for Zenith Televisions, January 1950.

Beginning in the 1950s, Zenith pioneered the use of TV wireless remote control, with its "Flash Command" and "Space Command" remote controls beginning in 1955 and 1956, respectively. Some models of Zenith's System 3 line of televisions made from the late 1970s to the early 1990s had a feature called the "Space Phone" which was basically a hands-free speakerphone built into the television set.





A Zenith Space Command 600 remote control.

Zenith introduced its first color TV sets for consumers in 1961 and quickly established itself as a leading brand. The 1969 introduction of the revolutionary "Chromacolor" black-matrix (negative guardband) picture tube doubled the image brightness of color television and established a new standard of performance for the entire industry. The "EFL" (extended field length) electron gun in 1976 and the "System 3" modular TV chassis in 1978 contributed to Zenith's continued strength in color television during the 1970s. Some of Zenith's Chromacolor and System 3 lines in the late 1970s also included a zoom feature that allowed for the image being displayed on the television screen to be zoomed into, by overscanning the raster of the CRT so that the middle of the image would be displayed.

A major Zenith advance of the 1980s was the patented "flat tension mask" technology for high-resolution color video displays with perfectly flat screens, glarefree viewing and superior performance, which earned the company a technical Emmy in 2001. Other noteworthy Zenith television innovations include TV receivers with "Sound by Bose" in 1986 and "Dolby Surround Sound" in 1988, as well as the first TVs with built-in closed caption decoders in 1991, the first TVs with built-in on screen electronic program guide in 1994, and the first TVs with a track-ball operated remote control in 1995. Zenith was a pioneer in digital high definition TV (HDTV), inventing the vestigial sideband (VSB) transmission standard that was adopted in 1996 by the FCC as part of the Advanced Television Standards Committee (ATSC) standard. In 1997, Zenith and other members of the Digital HDTV Grand Alliance earned a technical Emmy for their pioneering developments behind the ATSC standard.

For over 30 years beginning in the 1950s, Zenith was America's number two television company behind RCA, and it remained independent longer than any other major U.S. TV manufacturer.

Other Products and Computers

Other notable Zenith achievements and products include the "Cobra" phonograph pickup (which used a moving vane to modulate an RF signal), the Radio Nurse (a forerunner of today's wireless baby monitors), the Ravox hearing aid, and the "Wincharger" wind-driven generator for farms (and radios specifically designed to operate with them).



1955 Advertisements for Zenith's Remote Control Often Depicted Flash-Matic in the Hands of Women.

Zenith's other famous radio products included the "Royal" series of transistor radios and the continuing manufacture of the Trans-Oceanic series of shortwave portable radios, which remained in production from 1942 to 1981.

Zenith was the first company to experiment with subscription television, launching their Phonevision concept on experimental Chicago station KS2XBS. Their experiment involved a descrambler box mounted on the television set, and plugged into the telephone lead. When a preannounced broadcast was ready to begin, viewers would call an operator at Zenith who would send a signal with the telephone leads to unscramble the video.

Zenith was also one of the first American manufacturers to market a home VCR, selling a Sony-built Betamax video recorder starting in 1977.

But by the late 1970s, mounting competitive pressures in its core consumer electronics business led Zenith to use its broad engineering and marketing expertise to diversify, as the company entered the original equipment manufacturer (OEM) components and cable television products businesses.

In 1979, Zenith entered the computer market with the purchase of Heath Company, the world's largest maker of build-it-yourself electronic kits. Zenith capitalized on Heath's line of computers, building it into the billion dollar Zenith Data Systems (ZDS).

Zenith marketed its last radio in 1982, including the end of the line for its Trans-Oceanic series. The company changed its name to Zenith Electronics Corporation in 1984, to reflect its interests in computers and CATV, and since it exited the radio business two years earlier.

Zenith's Antitrust Lawsuit

In the late 1960s, Zenith began encountering increasing financial difficulty as their market share progressively went to Japanese companies. In 1974, Zenith filed suit in federal court in Philadelphia against the major Japanese television and electronic manufacturers charging violation of U.S. Antitrust Laws and the Antidumping Act of 1916. In 1981, the trial court entered summary judgment for all defendants on the antitrust and antidumping claims and dismissed the lawsuits. An appellate court affirmed the summary judgment, and in March, 1986 the Supreme Court ruled in favor of the defendants on Zenith's antitrust claims. Zenith's hopes to salvage a victory on the claims that the defendants violated the Antidumping Act of 1916 ended in April 1987 when the Supreme Court refused to hear an appeal from the U.S. District Court of Appeals which upheld the ruling of the trial court in favor of the Japanese. In the end, Zenith had spent millions of dollars in connection with the litigation without achieving a favorable result.

The End of Zenith

By the late 1980s ZDS's profits sustained Zenith while its TV business continued to lose money. To raise funds for HDTV research efforts and to reduce debt, Zenith sold ZDS in 1989.

In 1990, Zenith found itself in further financial trouble and was becoming increasingly attractive for a hostile takeover. To avoid this, Zenith sold a 5% ownership stake to LG Electronics as part of a technology-sharing agreement. With their analog line aging (the last major update to the line had been the System³ chassis in 1978), and the adoption of HDTV in the U.S. still decades away, Zenith's prospects were dim. LG was forced to come to the rescue, and in 1995 LG raised its stake to 55%, enough to assume a controlling interest.



The last logo used during the U.S.-owned period, outside Zenith's corporate headquarters in Glenview, Illinois, in 1995.

Zenith filed for Chapter 11 bankruptcy protection in 1999. In exchange for its debts, LG bought the remaining 45% of the company. During this period, some of Zenith's products were being rebranded as OEM products under the Admiral name. In the summer of 2000, Motorola bought Zenith's profitable Network Systems Division, which produced set-top boxes for cable and satellite TV NSD became part of Motorola BCS (Broadband Communications Sector).

Today, Zenith is a wholly owned subsidiary of LG Electronics. Zenith remains a leading U.S. technology and licensing company. The Zenith R&D Lab, based in Lincolnshire, Ill., is the headquarters for LG's U.S. research subsidiary for consumer electronics, hospitality and health care innovations, as well as broadcasting standards and technologies. LG produces the Zenith DTT-900 and Zenith DTT-901 ATSC digital television converter box. LG also offers Zenith branded plasma, LCD, and direct view televisions through selected retail outlets.

Further Reading

Many high quality information references are available to learn about Zenith's history. A few recommendations (in dated order) include:

- Zenith Electronics LLC, corporate heritage at www.zenith.com.
- <u>Wikipedia</u> and a number of other current online sources offer substantial information about Zenith, MacDonald, MacMillan and the many people involved with Zenith's history.
- <u>The Early Zenith Radios</u>, Gilbert M. Hedge, Schiffer Publishing Ltd., Atglen, PA, 2014.
- Zenith Trans-Oceanic: The Royalty of Radios, John H. Bryant and Harold N. Cones, Schiffer Publishing Ltd., Atglen, PA, 2008.
- Zenith, the Glory Years, 1936-1945, Harold Cones, John H. Bryant, and Martin Blankinship, Schiffer Publishing Ltd., Atglen, PA, 2003.
- Zenith Transistor Radios: Evolution of a Classic, Norman R. Smith, Schiffer Publishing Ltd., Atglen, PA, 1998.
- Zenith, the Early Years 1919-1935, Harold N. Cones, John H. Bryant, Martin Blankinship, and William Wade, Schiffer Publishing Ltd., Atglen, PA, 1997.
- Radio Manufacturers of the 1920s, Vol. 3, Alan Douglas, Vestal Press Ltd., New York, 1991.
- <u>The Zenith Story: A History From 1918-1954</u>, Zenith Electronics Corporation, 1955.

TURN THAT DIAL BACK IN TIME

By Keith Schreiter

TELEVISION TEST PATTERNS

What came first, television or the television test pattern? If you remember test patterns, chances are you were staying up way past your bed time! It's fascinating how many different patterns there are. By all accounts, the once ubiquitous, static bullseye that appeared on kinescopes and cathode ray tubes from the 1940s through the 1970s before stations began airing their scheduled programs (or when malfunctions occurred) may not have preceded the actual invention of television, which surprisingly began during the 1880s, but it was the first real transmission that was seen on TV. The earliest dimensional image appeared on screen in the late-twenties. NBC's experimental station W2XBS broadcast a rubberized model of Felix the Cat (the only object that would not melt under intensely hot studio lights) in the mid-1930s.

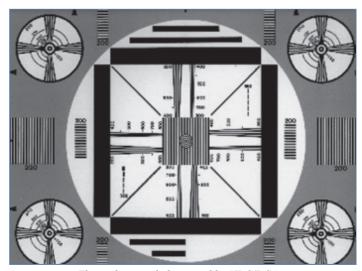
The origin of the test pattern is a story of form following function. Aesthetics were irrelevant to the primary purpose, and the technical draftsmen who anonymously designed it could have never predicted that decades later test patterns would become a nostalgic icon. The intent was to enable engineers, who in the so-called "pre-television" days were the only persons to actually receive broadcasts, to calibrate the extremely small, very crude black and white scans that became the TV picture. While the circular target may seem odd given the rectangular shape of even the earliest screens, in fact, the initial test patterns conformed to the circular shape of an oscilloscope that showed engineers the electrical equivalent of an image in the form of a wave. But there was an even more deliberate rationale.



Image from 1929 with 60 lines of resolution.

In the twenties, test patterns (or test charts as they were referred then) were more or less varied; but in the late thirties, when a few hundred receivers became commercially available, a standard was embraced by broadcasters. The chart was designed to both check transmitter performance from the studio to the antenna and allow the audience to determine the degree of performance of their individual receivers. In addition to the advantage of being a static signpost, of sorts, the chart revealed geometrical defects, horizontal and vertical degrees of picture resolution, and a range of shading gradations.

The archetypical chart used by NBC/RCA, which had merged to form the first television "network" in the thirties, consisted of an outer circle that had a diameter equal to four-thirds the diameter of the inner circle; the former touched the sides of the screen and the latter was cut off on top and bottom. This conformed to the standard aspect ratio of 4:3. If the picture was too narrow (less than the aspect ratio), the circles took on an elliptical shape, with the major axis of the ellipses in the vertical direction; the converse was true if the picture was not high enough. The chart was, therefore, a diagnostic device to determine whether the transmitter scanning was too wide or narrow, too great or too little. The large circles had another important use. The scanning of the beams at transmitter and receiver had to move at a perfectly uniform rate or else the image would be expanded or condensed. If the circles were egg-shaped then the scanning was not uniform. The perceived defects could then be fixed by precision controls on the transmitter. Presumably, home receivers required only a one time setting upon installation, but invariably dials would shift so the test chart would aid the viewer in making the necessary adjustments.



The archetypical chart used by NBC/RCA.

The interior of the pattern was divided into sections. The innermost, shaded circles consisted of three concentric circular areas of differing density: the central area being black; the next an intermediate gray tone and the outer, was white. These were used to measure and set the contrast controls either at the transmitter or receiver. If the contrast control was set too high, the two inner areas turned to black, eliminating any degree of shading. Conversely, if the contrast was low, the picture becomes very flat or gray.

The bars that shot out from the bulls eye in four directions, called "definition wedges," consisted of vertical and horizontal black and white lines, arranged to increase

in width as they moved out from the center. The horizontal lines were used to measure vertical resolution, and the vertical lines measured the horizontal. The measurements were based on scan lines (a maximum then of 350 lines) of the screen. Like registration marks, the wedges highlighted faulty resolution and electrical focus that could be fixed at the point of origin. If the home users had read the TV manual they would know how to use the test chart, which in the early days of television appeared more frequently than the live programming. But by the fifties, the test pattern was shown in the early morning or very late at night, and most users randomly fiddled with the knobs and antenna, ignoring its functional benefits.

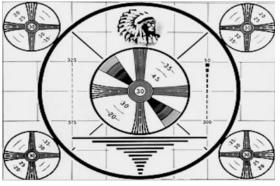


NBC test pattern circa 1941, when commercial TV broadcasts began in America.

By the early fifties, every TV station in America used a version of the same basic test chart until twenty-four hour broadcasting made it obsolete in the seventies. But one question remains unanswered. What about the most ubiquitous of all the pattern designs

— the one with the picture of an Indian? Where did it originate? Everyone recalls it, yet no one knows why the Indian was used.

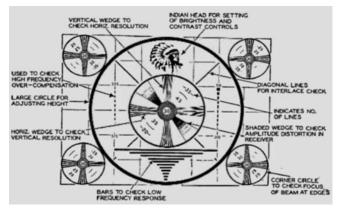
The graphic of the Indian and all of the patterns on the chart served specific purposes. By using the chart, many typical daily (sometimes hourly) adjustments on cameras, home, and studio monitors could be made. An experienced broadcast engineer could glance at the drawing of the Indian Chief and quickly know if everything was OK, or if Within the chart the tools necessary adiust perspective, framing, linearity, frequency response,



more careful adjustment was needed. Probably the most famous American B&W test pattern Within the chart the tools necessary to adjust perspective, framing, monoscope pattern originated by RCA in 1939.

differential gain, contrast and white level (brightness) are all provided. The grid and circles were used for perspective, framing and linearity. The tapered lines (marked with 20, 25, 30, and 35) were used for resolution and frequency response. The thin lines marked from 575 to 325 on one side and 300 to 50 on the other side referred to lines of resolution. The gray bands emerging from the center off to the lower right and upper left were for differential gain, contrast, and white level.

Only after the monitors were adjusted was an actual Indian-head test pattern used. A cardboard mounted lithograph of the test pattern was typically attached to a rolling vertical easel in each TV studio, to be videographed by each studio camera during test time. Then the cameras were adjusted to appear identical on picture monitors, by alternately switching between and comparing the monoscope image and the test card image. Such adjustments were made on a regular basis because television system electronics then used hot vacuum tubes, the operating characteristics of which drifted throughout each broadcast day.

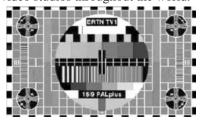


Indian Head pattern with its elements labeled, describing the use of each element in aligning a black and white analog TV receiver.

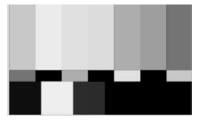
Test patterns were also broadcast to the public daily to allow regular adjustments by home television set owners and TV shop repair technicians. In this regard, various features in the pattern were included to facilitate focus and contrast settings, and the measurement of resolution. The circular "bulls-eyes" in the centre and the four corners permitted uniform deflection yoke and oscillator amplitude adjustments for centering, pin-cushioning, and image size.

The test pattern was usually accompanied by a 1,000 or 440 hertz sine wave test tone, which demonstrated that the TV aural receiver was working. If the tone was pure-sounding rather than a buzz or rattle, then transmitted speech and music would not be distorted. 440 Hz is somewhat less annoying for technicians to hear for extended work periods.

By the 1970s, color televisions were widely available. Originally conceived in the 1970s by Al Goldberg of CBS Laboratories, and previously categorized by SMPTE as ECR 1-1978, the development of a color test pattern was awarded an Engineering Emmy in 2001-2002. In an SMPTE color bar image, the top two-thirds of the television picture contain seven vertical bars of 75% intensity. In order from left to right, the colors are white, yellow, cyan, green, magenta, red, and blue. This sequence runs through all seven possible combinations that use at least one of the three basic color components of green, red, and blue, with blue cycling on and off between every bar, red cycling on and off every two bars, and green on for the leftmost four bars and off for the rightmost three. Because green contributes the largest share of luminance, followed by red, then blue, this sequence of bars thus appears on a waveform monitor in luminance mode as a downward staircase from left to right. Today, this is the standard set of color bars used by video studios throughout the world.



The 16:9 PAL version of the Philips test pattern as used by BRT, the Dutchlanguage Belgian broadcast organization.



Today's standard set of color bars used by video studios throughout the world.

BUSINESS CARD ADS

We invite all of our members to scan and send in your business card to be included in *ARCI News*. For \$80 your card will appear in the next 6 issues! Your card will be seen by approximately 400 people per issue and up to 1,000 people at *Radiofest* where we make additional copies of ARCI News available at no charge. If interested, please scan your card and send it to jbart1964@gmail.com and mail a check for \$80 to Rudy Hecker, ARCI Treasurer, 127 Weymouth Court, Schaumburg, IL 60193. Thank you all for your continued support of ARCI!!!



PAID ADVERTISING

THE VINTAGE HAM RADIO OPERATORS AND COLLECTORS

EVENT OF THE YEAR

MIDWEST CLASSIC RADIO HAMBOREE

The 2015 event will be held as part of the SIX METER CLUB OF CHICAGO

and the

ANTIQUE RADIO CLUB OF ILLINOIS' HAM RADIO AND ELECTRONIC FLEA MARKET

SUNDAY, JUNE 21, 2015

AT THE DU PAGE COUNTY FAIRGROUNDS ~ WHEATON ILLINOIS http://MCRN3885.net/ ~ (MCRN3885.net)

IARCHS Annual Antique Radio Auction ~ Saturday, May 2nd 2015 10:00 AM

Hayrack items start at 9:00 am

Auction Building at Hawkeye Downs, 4400 6th Street SW, Cedar Rapids, Iowa Mark your calendars - plan on attending!

Radio check in and auction set-up will be Thurs. April 30th and Fri; May 1st from 9 am to 5 pm. Auction organized by IARCHS and professionally conducted by Brent Wears, one of Iowa's leading auctioneers. Send digital photos of items to be consigned to Craig Huseboe for advance promotion. Watch the Wears Auctioneering website for featured radios and the latest auction information! \$5 minimum opening bid except for hayrack items. Questions please contact us:

Graig Huseboe — (614) 844-8748 - Email: cmhusebo@marshallnet.com

Dave Perkins — Club President - (641-485-7919 - Email: spamhole1951@gmail.com

Brent Wears — Wears Auctioneering, Inc (319) 624-3779 - Email: brent@wearsauctioneering.net www.wearsauctioneering.com (auction info) • www.iowa-antique-radio-club.com/ (club info)

Sponsored by Iowa Antique Radio Club and Historical Society

CLUBING AROUND

EARLY TELEVISION FOUNDATION CONVENTION

The ETF will host its annual convention on May 1-2-3, 2015 at the Early Television Museum in Hilliard, Ohio. Additional information can be found at http://www.earlytelevision.org/2015_convention.html.

DAYTON HAMVENTION

The Dayton Hamvention will be May 15-16-17, 2015 in Dayton, Ohio. This is the largest ham radio fest/convention in the world. Additional information can be found at http://hamvention.org/.

ANTIQUE WIRELESS ASSOCIATION

The Antique Wireless Association will have its spring meet on Saturday, May 2, 2015 at the AWA Museum in Bloomfield, New York. As part of this year's Spring Meet, the AWA will hold a very special BIG auction of duplicate items from the Museum's collection. The BIG auction will be held in the afternoon at Rhonda's Auction House just down the street from the Spring Meet and the Museum. A partial list of items to be auctioned will be posted on the AWA web site as they are set aside for the auction. The spring meet will be followed by the annual AWA board meeting. The 2015 Annual Convention will be August 11-16. The AWA, our national affiliate, publishes the AWA Journal and the AWA Review. Dues are \$35 per year. Information can be found at http://www.antiquewireless.org/.

WISCONSIN ANTIQUE RADIO CLUB, INC.

The next two WARC meetings will take place March 29 and May 31, 2015 from 8-11am at The Terminal, located at 5917 South Howell Street in Milwaukee near the airport. For more information, please contact President Greg Hunolt at 920-893-0422 or at ghunolt@excel.net or see the website at www.warci.org.

NORTHLAND ANTIQUE RADIO CLUB

Radio Daze 2015, the Upper Midwest's ultimate vintage radio collecting event, will be held Friday and Saturday, May 15-16, 2015 in Plymouth, Minnesota. For more information, please see http://www.northlandantiqueradioclub.com/index.shtml.

MICHIGAN ANTIQUE RADIO CLUB

MARC's VINTAGE ELECTRONICS EXPO will be July 9-11, 2015 in Kalamazoo. Details will be announced. For more information see www.michiganantiqueradio.org.

INDIANA HISTORICAL RADIO SOCIETY

The IHRS Spring Meet in Kokomo will be Friday and Saturday, May 1-23 at the Quality Inn Suites, Kokomo, Indiana. For more information see http://www.indianahistoricalradio.org/ihrsched.htm.



PO Box 1139
LaGrange Park, IL 60562