

ARCI NEWS

www.antique-radios.org

Affiliated AWA
Antique Wireless Association

Volume 37, Issue 6 December, 2018



HAPPY HOLDAYS TO ALL!!!

UPCOMING INDOOR MEET DECEMBER 9, 2018

AMERICAN LEGION HALL

570 South Gary Avenue, Carol Stream, IL

December 9, 2018 7AM – 11AM

Donation Auction BUSINESS MEETING

Boy Scout Pancake Breakfast



2019 ARCI MEET SCHEDULE

February 24, 2019	7AM-9:30AM Indoor Swap Meet People's Choice Contest, Officers' Meeting 9AM	American Legion Hall Carol Stream, IL (See Map)
April 28, 2019	7AM-11AM Outdoor Swap Meet Inside Business Meeting 9:30AM	American Legion Hall Carol Stream, IL (See Map)
June 16, 2019	Outdoor - Gates Open 7AM Combined Meet With 6-Meter Club of Chicago	DuPage County Fairgrounds Wheaton, IL (See Advance Ticket Form & Map)
August 2-3, 2019	RADIOFEST	Medinah Shriners / Addison, IL
October 6, 2019	7AM-11AM Outdoor Swap Meet Business Mtg./Officer Election 10AM	American Legion Hall Carol Stream, IL (See Map)
December 8, 2019	7AM-11AM Indoor Swap Meet Business Meeting 10AM	American Legion Hall Carol Stream, IL (See Map)



ARCI MEMBERSHIP RENEWALS



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<u>Membership Option</u>	<u>Dues</u>	<u>Benefits</u>
Annual Membership	\$ 25	Full benefits: <i>ARCI News</i> subscription, Fee Discounts At Events, Seller Privileges at ARCI Events.
Spousal Annual Membership	\$ 10	Discounts at Events.
Student Annual Membership	\$ 5	Must Be 18 or Under, Full Benefits.
Lifetime Membership	\$340	Full Membership Benefits For Life (non-

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Antique Radio Club of Illinois P.O. Box 1139 LaGrange Park, Illinois 60526

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PRESIDENT'S MESSAGE

Warmest Holiday Greetings from your ARCI President! I am writing this column on the heels of a major November snowstorm accompanied by record cold temperatures. It is a not-so-gentle reminder that summer is over, and now is the time for us to finally settle down and concentrate on what is important this holiday season. Your radio collection, which you have been neglecting for many months, once again beckons for your undivided attention. ARCI has just the thing to focus your attention and to get you back on track at our December 9th swap meet.

The October meet at the American Legion Hall in Carol Stream was another great one, despite some challenges. A damp parking lot pavement from a Saturday evening rain, combined with an early morning temperature of 50 degrees, drove our outdoor swap meet inside. It is so nice to have that option! Unfortunately, the Boy Scouts were unable to provide their usual breakfast, so we feasted on donuts. We were reminded just how much we appreciate having the Scouts offer breakfasts! The number of registered seller spaces was typical for an October meet. The Donation Auction was a real highlight of the meet. Our long-time member, Marc Ellis, donated many goodies from his extensive collection of radios and electronic items. The quantity of Marc's items, along with those from other members, was so great that we had to move the auction to a different room. Thanks so much to Marc and all of those who donated items. Thanks to Art Bilski, Rudy Hecker, Tom Kleinschmidt, Bill Cohn, and the others who helped bring the items to the American Legion and those who ran the auction! Everyone's efforts contributed to raising \$1.127 for ARCI.

Here is some preliminary information about *Radiofest 2019*. We have already secured the venue and hotel, and are now in the process of assembling the teams that will manage the various events. Here is the news so far:

- Our dates for *Radiofest 2019* will be Friday-Saturday, August 2 and 3. Note, we have returned to our early-August schedule.
- We will remain on the two-day schedule (Friday and Saturday only). We will open with the Main Auction on Friday evening and hold the outdoor swap meet on Saturday through mid-afternoon. The speaker programs, display, and contest setup will take place during the day on Saturday. The awards banquet with entertainment take place on Saturday night. The usual donation auction will be late Saturday afternoon to close the event.
- Radiofest 2019 will return to the Medinah Shriners facility in Addison, Illinois, with the adjacent Hilton Garden Inn providing overnight accommodations. We look forward to returning once again to these superb facilities that have provided us with such a wonderful experience for the last two years.
- We have already secured a block of rooms at the Hilton Garden Inn for Thursday-Saturday at a special \$99 rate. Watch the ARCI Web site www.antique-radios.org and upcoming ARCI News for information regarding online and over-the-phone hotel reservations. Make sure to mark your calendars for Radiofest 2019.

I hope to see all of you at our next meet on December 9th. This will be our fourth annual Janet LaVelle Holiday Party, and as in the past, it promises to be another great one. Our December meets have historically been some of our best, with many sellers and a great donation auction. Come out to Carol Stream and buy yourself or someone close to you a nice holiday gift.

Don't forget about our business meeting following the December 9th meet. This is an important meeting, and we invite all ARCI members to attend. In addition to numerous topics of discussion, we will be holding the final votes for our roster of 2019 club officers. If there is anything you would like to suggest for discussion regarding club activities or policies, this is the time to bring it up.

I have enjoyed my first year as your president. I have also confirmed what I really knew all along ... the longevity and success of this club is a result of the dedicated officers, volunteers and members-at-large that have provided support throughout the years. Our ARCI By-Laws (created in 1985) state that "The purpose of this club shall be to preserve the history and enhance the knowledge of radio and related disciplines." Radiofest continues to be our "Window to the World," and I cannot think of any aspect of that event that does not support our stated purpose. As always, I welcome your thoughts, ideas and suggestions. Feel free to contact me at smuchow@att.net.

> See You At The Next Meet, Steve Muchow ARCI PRESIDENT

> > Officers

Steve Muchow, President

ARCI UPDATE

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

OFFICERS FOR 2019

ARCI will hold its annual business meeting and officer elections at the December meet. The following people are nominated to serve another year:

•	· · · · · · · · · · · · · · · · · · ·
David Bart	Jim Novak, Vice President
Art Bilski	Keith Schreiter, Secretary/Membership
Harry Blesy	Rudy Hecker, Treasurer

Board of Directors

Dr. Barry Janov, Chairman

Ed Huether Tom Kleinschmidt Steve Muchow Robert Piekarz Olin Shuler John Stone Jeff Aulik

VOLUNTEERS FOR 2019

ARCI has been fortunate to have a great team of volunteers over the years who have faithfully and generously served the club. They deserve your thanks and recognition for all the support they provided. Remember, ARCI is your club and we need your help too! As we all pitch-in, the club will continue to improve for everyone's benefit. Please talk with one of the officers, Board Members or current volunteers for more information on how you can lend a hand. ARCI looks forward to working with the following during the upcoming year.

Nicholas Tillich, *Radiofest* Auction Coordinator Jim Sargent, *Radiofest* Auctioneer Tom Kleinschmidt, Bill Cohn, Donation Auction Judy Huether, *Radiofest* Coordinators Elaine Hecker, Registration Art Bilski, Public Relations Julia & David Bart, *ARCI Newsletter* Editors John Stone, *Radiofest* Auction Coordinator
Jim Novak, WA9RCI Ham Radio Station
Ron Grams, WB9IMR, Trustee of FCC Ed &
License WA9RCI
Rudy Hecker, Signage, People's Choice
Contest
Jim Rajkovac, Webmaster
Cindy Fudge, *ARCI Newsletter* Publisher
Karl Johnson & Pete Nauseda, Parking and

YEAR END 2018 ANNUAL REPORT

Information

By Steve Muchow, ARCI President

2018 ANNUAL REPORT

I am happy to report that ARCI has remained on solid ground throughout fiscal year 2018 with respect to membership, activities, and finances. Our membership levels remain solid, our meets are well attended by both buyers and sellers, and our finances have continued to strengthen. Here are some additional details about each of these areas.

MEMBERSHIP: ARCI's paid membership is now approximately 250 members, and continues to remain stable in an environment where many other clubs are experiencing substantial attrition. Due to our year round membership renewal schedule, there is considerable short-term variation in the number of active paid members. While renewals do occur all year, the bulk of them take place from just prior to *Radiofest* through our December regional meet. Between our mail-in renewals that accompany Radiofest applications and on-site membership renewals at *Radiofest* itself, we have totaled approximately 100 *Radiofest*-related membership renewals alone. We also hope to see somewhere between 20 and 30 total additional membership renewals taking place during the December meet. We received several life-memberships this year, and we want to extend our appreciation to those who pledged their support to the club in that way. Please check your membership expiration date! If your membership has expired, please help your club by remembering to renew at the next meet or by mail. Your membership dues are critical to the health of our club and we cannot continue without your financial support. Thanks to all of you for your support of ARCI over these many years.

ACTIVITIES: Our meets, including both regional meets and *Radiofest*, remain very popular and well-attended events. Our regional meets in Carol Stream have an average of 25 seller spaces per meet and approximately 75-85 buyers and sellers in attendance, depending on the time of year. One of our most popular regional meets is our December indoor Janet LaVelle Memorial Holiday Party that features around 30 sellers and a large donation auction. *Radiofest 2018* was a highly successful and well-attended event. Our venue and hotel were a hit, and we anticipate a repeat performance in 2019. Over 130 individual selling spaces were sold in our swap meet lot, with more than 400 estimated buyers in attendance from 18 different states plus Canada. The main auction tallied gross sales of over \$34,000, our third highest result ever. Items consigned to the main and donation auctions helped us fully finance the costs of our auction facilities and support. This, in conjunction with our registration fees, again enabled us to completely self-fund *Radiofest 2018* without tapping directly into the club's cash reserves. We have excellent working relationships with the Shriners, Hilton Garden Inn and the Carol Stream Legion and are confident these will continue.

FINANCES: One of the most important tasks for any ARCI president is to ensure the financial health and stability of the club. I am happy to report that the club's finances are still strong. We have improved our club's bottom line during the course of Fiscal Year 2018. Much of this year's increase is attributed to generous donations to the club (both in cash and items) for our donation auctions, proceeds from our *Radiofest 2018* auction that helped make *Radiofest* self-funding in total, and the cost savings we have realized through our arrangements with the Medinah Shriners *Radiofest* venue. We also continue to evaluate how to best utilize equipment for our AV needs and by carefully selecting other vendors that offer us the highest value for our money. These savings give the club a much-needed financial buffer to weather issues like increasing costs for *Radiofest*, membership attrition, and other unforeseen challenges. We continue to look at ways to get more for each club dollar and welcome new ideas.

RADIO ZONE

An Occasional Column About Radio Related Topics
By David Bart

Editor's Note: The following article appeared in the Fall 2018 issue of the Proceedings of the Radio Club of America and is reprinted courtesy of RCofA.

THE PRE-HISTORY OF SILICON VALLEY—RADIO AND TELEGRAPHY

In August 2018, the Institute of Electrical and Electronics Engineers (IEEE) celebrated the birth of Silicon Valley. Shockley Semiconductor Laboratory deserves credit as the birthplace and for its legacy of subsequent companies that emerged to manufacture products for the semiconductor and computer industries (see related article in this issue). However, Silicon Valley's roots go farther back—to radio and to the telegraph.

A Geographic Center

The geographic area in California that stretches from Napa Valley to San Francisco to San Jose was a center for innovation dating back to the 19th century. William Shockley grew up in Palo Alto and had exposure to this background long before he travelled east to Bell Laboratories and then returned to form his own company. The San Francisco/San Jose region and the Santa Clara Valley, also known as the Valley of Heart's Delight, were

famous for agricultural production of apricots, cherries and prunes. San Francisco was a major port city and a gateway to Hawaii and Asia. The Gold Rush left its lingering impact on the region as visionaries sought and supplied capital for new and novel innovations of all kinds.

The Telegraph

The telegraph entered California in 1853, just nine years after Samuel Morse's 1844 demonstration of a communications link between Washington and Baltimore. The new California Telegraph Company linked San Francisco to San Jose, Stockton, Sacramento and Marysville. The Northern California Telegraph Company went north toward Eureka, and the Pacific Atlantic Company extended lines to Los Angeles by 1860. Both soon merged into the California Telegraph Company.

Jeptha Wade consolidated Western Union's lines with California Telegraph as they headed east toward Salt Lake City as part of the new Transcontinental Telegraph, completed in 1861. An ambitious overland route north through Russian Alaska (the territory was not acquired by the United States until 1867) and into Siberia, Perry Collins' Russian-American Telegraph, was never completed. However, the Pacific Cable between San Francisco and Honolulu, finished in 1902, reached all the way to Manilla by 1903. Private capital financed these ventures with limited government support.

Wireless Enters The Scene

The early years of the 20th century brought a new technology. Cyril Elwell sought to develop wireless communications by licensing the Poulsen Arc transmitters from Valdemar Poulsen in Denmark, who generated continuous-wave radio signals beginning in 1902. Poulsenarc transmitters were used internationally until vacuumtube transmitters developed by Lee de Forest and others after 1907 superseded them. Elwell formed Federal Telegraph Company in 1909 in Palo Alto with funds from "angel investors." He included Stanford University in his efforts to research, develop, and expand the technology. By 1912, Federal was sending and receiving wireless messages between San Francisco and Honolulu.

The U.S. Navy became interested in Federal's work for ship-to-ship and ship-to-shore communications and bought the system for its vessels. By the end of World War I, Federal had installed some of the most powerful systems in the world, with million-watt stations in Panama, the Philippines, Spain, Arlington (Virginia), Los Angeles (California) and Portland (Oregon).

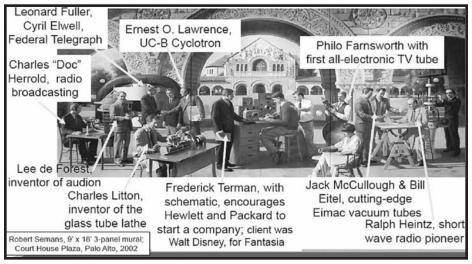
Radio Evolves

Peter L. Jensen worked for Poulsen in Denmark, migrated to Napa Valley, worked for Federal, and later operated in several locations in the San Francisco area. He developed, with Edwin S. Pridham, the first moving coil loudspeaker in 1915. That led to development of the dynamic loudspeaker for radio in 1919. Jensen, who co-founded Magnavox, later resigned and founded the Jensen Radio Manufacturing Company in 1927. He remained president until 1940 and was a consultant to the radio and radar division of the U.S. War Production Board in Washington, D.C., from 1942 to 1946.

Another Stanford engineer, Charles "Doc" Herrald, started a radio company in San Francisco, which was destroyed in the 1906 earthquake. He relocated to San Jose and founded his College of Wireless and Engineering in 1909 in the Garden City Bank Building, and later launched the first regular commercial radio broadcast, "San Jose Calling." His station operated with the call signs FN, SJN and KQW and eventually became KCBS.



Mural by Robert Semans at Courthouse Square in Palo Alto, California.



Key radio and television personalities in the mural (courtesy Paul Wesling).

Vacuum Tubes And Research

Otis Moorehead established Moorhead Laboratories in 1917 in San Francisco to manufacture vacuum tubes. William Eitel, Jack McCullough and Charles Litton became famous for their entrepreneurial investments in equipment manufacturing and vacuum tube production, as well as their strong support of ham radio in the 1910s and 1920s. Remler, Magnavox, Heintz and Kaufman, and Federal Telegraph all supplied radio equipment to the professionals and amateurs.

Fred Terman and Herbert Hoover were both amateur radio operators. Hoover became the 31st president of the United States and later left his mark with the Hoover Institution at Stanford. Terman developed Stanford's electrical engineering coursework, co-established the vacuum tube laboratory, and wrote Electronic and Radio Engineering,

one of the most important books on circuits and instruments. He encouraged his students to form their own companies and personally invested in many of them, resulting in firms such as Litton Industries, Varian Associates, and Hewlett-Packard. Terman was president of the Institute of Radio Engineers. After World War II, he became dean of Stanford's engineering school. He was responsible for developing the Stanford Industrial Park (now Research Park) in 1951 as a joint initiative between Stanford and Palo Alto. It has been called an engine for Silicon Valley and the epicenter of Silicon Valley.

The brothers Russell and Sigurd Varian invented the klystron, which became a critical component of radar, telecommunications, and other microwave technologies. In 1948, they founded Varian Associates to market the klystron and other inventions, becoming the first company to move into Stanford Research Park, which it did in 1953.

A Culture Emerges

Together, these and other people and companies formed a cultural and business environment that became a nucleus for a research, investment, and development. That nucleus of activity would create and advance leading technologies for the world. Terman's initial development of the Stanford Research Park is widely credited, together with William Shockley's laboratory, as being the genesis of the modern Silicon Valley. In view of the region's long history, in many ways, this modern culture of innovation stemmed from the region's early roots in radio.

Resources

- David Bart, The Real Origins of Silicon Valley's Technology Culture, *Proceedings* of the Radio Club of America, Fall 2015.
- Alice L. Bates, *The History of the Telegraph in California, Annual Publication of the Historical Society of Southern California*, University of California Press on behalf of the Historical Society of Southern California, Vol. 9, No. 3 (1914).
- Gorden Greb and Mike Adams, *Charles Herrold: Inventor of Radio Broadcasting*, McFarland Publishing, 2003.
- William Jensen, *The Valley and the Vox*, Emperio Press, 2015.
- Paul Wesling, The Birth of Silicon Valley: Radio Leads the Way, *The Institute*, IEEE, March 1, 2018.
- Paul Wesling, The Origins of Silicon Valley: Why and How It Happened, Stanford Historical Society Presentation, April 12, 2018.



HISTORY ZONE

An Occasional Column About Topics of Historical Interest By David Bart

Editor's Note: The following article appeared in the Fall 2018 issue of the Proceedings of the Radio Club of America and is reprinted courtesy of the RCofA.

Opening Lines: First Christmas Speech on Radio

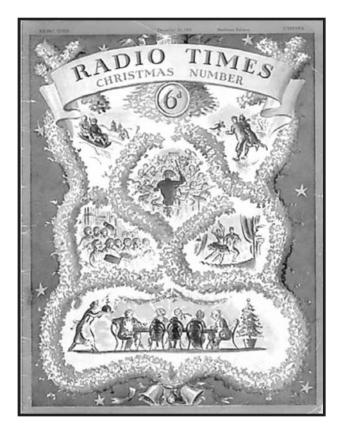
"Through one of the marvels of modern Science, I am enabled, this Christmas Day, to speak to all my peoples throughout the Empire. I take it as a good omen that Wireless should have reached its present perfection at a time when the Empire has been linked to closer union. For it offers us immense possibilities to make that union closer still." --- King George V, December 24, 1932

The idea for a Christmas message from the sovereign to the British Empire was first proposed by the "founding father" of the British Broadcasting Corporation (BBC), John Reith, in 1922 when he approached King George V about making a short broadcast on the newly created radio service. The King declined, believing that radio was mainly an entertainment. Reith approached the King again ten years later, in 1932, as a way to inaugurate the Empire Service. The King, a reluctant speech-giver and unashamed technophobe, again declined.

Winning Over The King

The next year, the BBC gave the King a radio, which he regularly used, becoming a particular fan of the news service. At the opening of various functions throughout the 1920s, such as the British Empire Exhibition in 1924, the King's opening addresses were recorded by the BBC, with some attracting around 10 million listeners throughout the empire, a record for the period. Yet, he could not be persuaded to give a personal message to the population on Christmas Day. He believed that he lacked the sophistication and flair of other broadcasters.

All this changed with the appointment of Ramsay MacDonald as the first Labor Prime Minister in 1929, a man whose simplicity in approach the King admired and respected. MacDonald assuaged many of the King's fears about a personal broadcast, saying that a simple, honest approach would be more than adequate for the task. The Prime Minister suggested that Rudyard Kipling could write the speech, thus relieving the King of another anxiety.



Radio Times listing for the first Christmas broadcast in 1932.

The new Statute of Westminster, signed in 1931, transformed the Empire into the Commonwealth, effectively removing the dominion nations from Britain's direct imperial control, and creating a federation of equals under the Crown. MacDonald convinced the King, that the Monarchy was pivotal for maintaining unity. So, on Christmas Day 1932, as the people of the British Empire sat around their radios, the King entered their homes for the first time. The event was widely covered in newspapers, emphasizing that the King would deliver a personal message as opposed to a formal address.

The King Gives The Speech

Since the King felt most comfortable in small rooms, the speech was made from the box room under the stairs at Sandringham House and not from the grand drawing room where the mini-studio was set up again for the official photograph. Thick cloth coated the table, and the King was so nervous that his shaking hands caused the papers to rustle into the microphone. He went on the air and read the words composed by Rudyard Kipling. His gravelly voice was likened to that of a father speaking to his family, earning him the moniker Grandpa England, which was later adopted by his granddaughter, the present Queen Elizabeth.



Official photo of King George V giving the First Christmas Message.

The Message Was Sent On The British Broadcasting Corporation's Empire Service

Two rooms at Sandringham were converted into temporary broadcasting rooms. The microphones were connected through Post Office land lines to the Control Room at the BBC's Broadcasting House. From there, connection was made to BBC transmitters in the Home Service, and to the Empire Broadcasting Station at Daventry with its six shortwave transmitters. The General Post Office was used to reach Australia, Canada, India, Kenya and South Africa.



Sir John Reith established The Empire Service allowing King George V's first Christmas Broadcast to be heard across the globe.



One of the first radio control rooms at the new Broadcasting House in 1932.



Radio Control Room at Broadcasting House, Christmas Day.

The time chosen was 3:00pm - the best time for reaching most of the countries in the Empire by short waves from the transmitters in Britain. In the event, the first Broadcast started at five past three (twenty-five minutes to four according to the King's 'Sandringham Time') and lasted two and a half minutes. The Broadcast was preceded by an hour-long program of greetings from all parts of the Empire. The broadcast was introduced from Ilmington Manor by 65-year-old Walton Handy, a local shepherd, with carols from the church choir and bells ringing from the town church.

Press Announcement

Because of the ever increasing television audience at home and overseas, The Queen has decided to be televised while she makes her Christmas broadcast this year.

The message itself will, however, be delivered in the traditional manner as a broadcast so that it may reach all parts of the Commonwealth alike.

BBC press announcement for the King's speech.

LIGHT SIGNALS

ABOUT 30 SECS. before broadcast starts, RED LIGHT will glow ON AND OFF for 15 SECS., as warning for SILENCE.

The RED LIGHT will then go out for about 15 SECS.

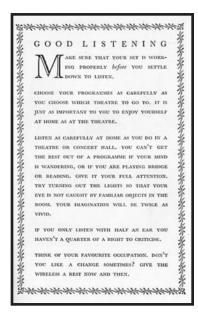
(From that time on all sounds in room may be radiated).

The RED LIGHT will then glow STEADILY as a signal that ALL STATIONS are ready for HIS MAJESTY to speak.

(While the RED LIGHT glows steadily, and until it is switched off, all sounds in this room will be radiated.)

B.B.C. Christmas Day 1932.

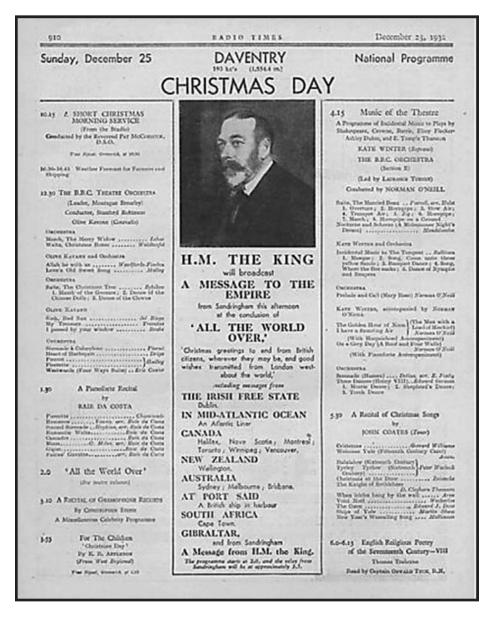
BBC network broadcast instructions.



BBC program notes for the audience.

A Tradition Is Born

The Broadcast made a huge impact on its audience of 20 million. Equally impressed, George V made a broadcast every Christmas Day until his death in 1936. The annual broadcast has continued on radio and television with subsequent Kings and Queen Elizabeth, an 86 year tradition.

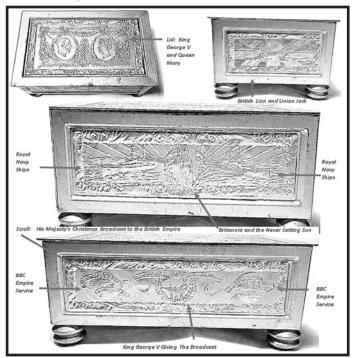


1932, the annual speech by the monarch has evolved into an important part of the Christmas Day celebrations for many in Since Britain and around the world.

Commemorative King George V Radio Broadcast, Royal Tin Box

A commemorative tin box was produced and purportedly given to members of the military. No dates or maker mark are stamped on the box.

- Written on one side are the words: 'His Majesty's Christmas Broadcast to the British Empire' with an image of the King sitting at a desk broadcasting the message.
- The opposite side is decorated with Royal Navy ships and Britannia holding a trident before a never setting sun.
- The narrower sides feature the British Union Jack, with a British lion in the center.
- The lid includes ribbons, bows, and a royal crown surrounding King George V and Queen Mary.



Commemorative King George V Radio Broadcast, Royal Tin Box. (Author's Collection)

References

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- Royal Family Website: "History of the Christmas Broadcast," https://www.royal.uk/history-christmas-broadcast.
- Wikipedia: "Royal Christmas Message," https://en.wikipedia.org/wiki/Royal_Christmas_Message.
- Gov.UK Website: "History of Government The First Christmas Speech," https://history.blog.gov.uk/2013/04/24/the-first-christmas-speech/.

NEWS FROM THE HAMSHACK

By Jim Novak, WA9FIH

ASTATIC'S D-104 MICROPHONE – THE "CHROME LOLLIPOP"

Trivia Question: What piece of amateur radio equipment or accessory enjoyed

the longest production run?

Answer: The Astatic D-104 microphone, whose basic physical design

remained the same throughout many production runs from

1933 until 2001!

Once voice broadcasting became practical in the early 1920s, ham operators were quick to jump onto the bandwagon. They enjoyed having a new mode to use besides CW ("Continuous Wave") – more commonly known as Morse code. Early microphones used carbon-based elements similar to those used in telephones for many years. But in 1930, two Youngstown Ohio ham friends, C. M. Chorpening, W8WR, and F. W. Woodworth, W8AHW, began trying elements using different materials to replace carbon, and eventually settled on a "condensor" type of element which did not require an excitation voltage as did carbon. One of their friends, Chaarles Semple, had been experimenting with various materials at Brush Laboratories in Cleveland, and provided the two with some suggestions.



Astatic D-104 UG-8 Stand.

Although the condenser elements worked well, there were some limitations, which led the ham partners to seek other materials for their microphone elements. They eventually settled upon a form of Rochelle salt crystals, which, though somewhat fragile, provided a clear, natural sounding audio signal that could be amplified to modulate the transmitter. Encouraged by the response of fellow hams in the area, Chorpening and Woodworth formed a partnership which was to become Astatic Corporation. Astatic still exists today in Conneaut, Ohio. In addition to microphones, they also developed a line of associated audio products, including speakers, phonograph pickups, recording heads, earphones, and similar devices that transformed mechanical energy into electrical energy.

Early D-104 microphones were introduced in 1933. They had the same basic shape as newer versions. They were about an inch thick and had screw eyes protruding from the chromed metal case so they could be suspended with springs from a circular loop hanger, similar to those used in commercial broadcasting.



Astatic D-104 1976 Golden Eagle Advertisement.



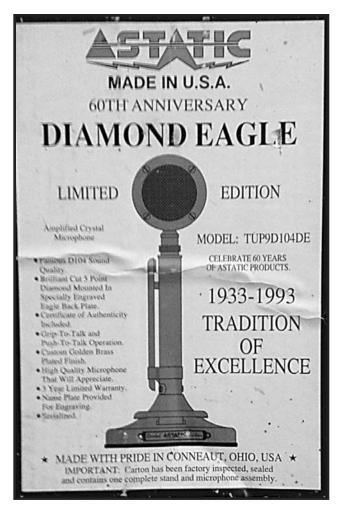
Astatic D-104 President Microphone Head.

The original D-104 microphones were high impedance instruments, which interfaced well with vacuum tube audio preamplifier inputs. Later on, when solid-state audio devices became practical following the introduction of the transistor, Astatic began offering microphones with lower impedance dynamic elements. When the FCC made the 11-Meter band available to the Citizens Band (CB) service, Astatic supplied many manufacturers of CB equipment with good quality, coil-cord, hand-held microphones as well.

Over the years that the D-104 was in production, several types of stands ("bases") were available, including the well-known "G" stand with a "grip-to-talk" bar on the side of the vertical stand. Some variations also had a push bar on the stand's base as well.



Astatic D-104 Silver Eagle Final Edition Box Label.



Astatic D-104 Diamond Eagle 1993 Box Label.

Special versions of the famous "chrome lollipop" appeared, including the Silver Eagle, with an elegant 1993 variation, the "Diamond Eagle." The Diamond Eagle did indeed feature a real diamond! A very sophisticated "Gold Eagle Diamond" D-104 was also available to hams wishing to have nothing but the best to complement their top of the line equipment.

Alas, sales began to drop off in the late 1900s, and Astatic finally decided to discontinue the D-104 in 2001. Nevertheless, it remains popular with collectors of vintage equipment as a highly respected accessory.

(Note: Portions of this article are derived from material presented in the 1946 Astatic Corporation catalog.)

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

FORMER MOTOROLA ENGINEER'S MUSEUM COLLECTION of 75 Motorola home, portable & auto radios from 1949-75, cleaned, polished, and currently on display including descriptive placards and posters, at the Quincy (IL) Museum. Some have minor blemishes not noticeable on display. An additional 20+ sets that exceeded display space are also included. Available as one lot only, after December 2018. \$3,000. Pick up only or pre-arranged delivery. Contact: oshuler@comcast.net or by phone 217-257-5830.

Everything I have radio related is for sale. Too much to list. If you want to see what I have, call David at 630-336-9790. I live in Woodridge, IL.

CLUBBING AROUND

ANTIQUE WIRELESS ASSOCIATION

The Antique Wireless Association will have its next meeting in May 2019 at the AWA Museum in Bloomfield, New York. The AWA, our national affiliate, publishes the AWA Journal, the AWA Review and The AWA Gateway. The latest edition of The AWA Gateway is available for free at http://www.antiquewireless.org/awa-gateway.html. Dues are \$35 per year. Information can be found at http://www.antiquewireless.org/.

WISCONSIN ANTIQUE RADIO CLUB, INC.

The next WARCI meeting will take place 8-11am on January 20, 2019 at the Knights of Columbus, 1800 S. 92nd Street, West Allis, Wisconsin, 53214. For information about the club, please see the web site at www.warci.org.

NORTHLAND ANTIQUE RADIO CLUB

The Minnesota Club has its next event is scheduled for February 24, 2019, a workshop and outdoor mini-swap meet. Radio Daze, the Upper Midwest's ultimate vintage radio collecting event, will be held in May 2019. For more information and the date, which will be announced, please see http://www.northlandantiqueradioclub.com/index.shtml.

MICHIGAN ANTIQUE RADIO CLUB

MARC's Vintage Electronic Expo is scheduled for 9am-4pm on January 26, 2019 at the Costick Center, 28600 Eleven Mile Road, Farmington Hills, Michigan. Details will be announced. Please see the MARC web site for more information at http://michiganantiqueradio.org/.

INDIANA HISTORICAL RADIO SOCIETY

IHRS Winter Meet will be held late-February/early March 2019 at the Lawrence Park Community Center, City of Lawrence, 5301 N. Franklin Road (north east Indianapolis). For dates and additional information please see http://www.indianahistoricalradio.org/ihrsched.htm.

CLASSIFIEDS

Everything I have radio related is for sale. Too much to list. If you want to see what I have, call David at 630-336-9790. I live in Woodridge, IL.





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