



# WARCI, Inc.

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

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## WARCI Information

WARCI is incorporated in the State of Wisconsin.

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

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

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

The next swap meet date is Sunday, September 18.  
Swap meet times are 8:00AM - 12:00 Noon. Doors open at 7:00AM for set-up.

## WARCI News

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

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

Classified ads up to ¼ page are free to WARCI members

The cut-off date for all newsletter material is about the fifteenth of the month preceding publication of the next newsletter (e.g. December 15, 2011, for the January, 2012 issue).

## WARCI Website

[www.warci.org](http://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](mailto:webmaster@warci.org). Thank you, Nick, for your great work.

### **Voluntary Member Directory**

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

# WARCI Headlines

## July 17 Meet

We had a light turnout at the meet, with 17 sellers, with so-so overall attendance. The Donation Auction sold 21 items bringing in \$94 for the club. The 50-50 Raffle was successful, bringing in a net of \$32 to the club. Once again, a highlight of the meet was the excellent pizza cooked and served by Joe Halser and his staff at the Terminal.

## Membership Update

Last year, 2010, we had 46 active, paid members. So far this year, we have 44 active paid members, including 4 new members and 40 returning members, but there are another 7 members who were active last year but did not renew.

## New Rules for New Member Dues

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

## September 18 Meet

For September we will continue the same 8:00 AM "official" flea market start time (doors open at 7:00 AM). Then the auction events will be:

9:30 - 10:00 auction check-in.  
10:00 - 10:30 viewing and sorting out the paperwork to get ready for the auction.  
10:30 - auction program (announcements, 50-50 raffle drawing, and the auction).  
(If we find we are ready to begin before 10:30 we could do so, with the announcements and raffle drawing).

The excellent Free Pizza will be served after the auction is finished.

See the next page for the WARCI Auction Policy.

## WARCI Needs You!

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

Public relations.

Providing radio services such as repair / restoration.

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

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

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

## Donation Auction Rules

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

# WARCI Auction Policy, September 2011

**Goal:** The goal of the WARCI auction is to facilitate the completion of transactions between buyers and sellers on terms agreeable to both in a friendly but business-like manner. The buyers and sellers, WARCI members and non-members, are collectors of antique radios and/or related items sharing a common interest.

**Scope:** Only vintage radios and related items will be accepted. WARCI reserve the right to reject lots. Radio related items may include vintage telephone, telegraph, television, or phonographs, as well as test equipment and radio literature. No computers, non-vintage solid state TV's, VCRs, etc., will be accepted.

**General:** All auction sales are final. The last bid at an auction is an oral contract between the seller and buyer and is legally binding. All lots will be sold as-is, where-is, without any guarantee implied or expressed by the seller or WARCI. It is the responsibility of the buyer to examine the lot(s) prior to bidding on the lot (s). WARCI (and The Terminal) is not responsible for loss of property, theft, or accidents.

Lots that do not sell and are not claimed by the consigner, or lots that are sold but are not claimed by the buyer, become donations to WARCI and WARCI property to be disposed of by WARCI as WARCI sees fit.

**Check-In:** All persons buying and/or selling must sign an acknowledgement of the WARCI auction policies to receive a bidder's card or consign a lot to the auction. Also:

WARCI will charge sellers a \$5 fee per lot, up to 5 lots allowed. Each lot may include up to 3 items (radios, boxes of tubes, etc.) There will be no seller's or buyer's commission.

There will be a \$1 charge for a bidder's card for persons only buying – a seller consigning at least one lot to the auction will receive a bidder's card at no charge.

The bidder's card will bear a number assigned by WARCI that will be used to identify the person buying and/or selling. Each lot will be identified by the bidder's card number and a lot number.

**Reserve:** Sellers will have the option of placing a reserve value on each lot they consign. The lot will not be sold for less than the reserve amount without the seller's consent. (Reserve amounts are not revealed prior to the auctioning of a lot, and only then if the high

bid falls short of the reserve amount. In that case, the high bidder will be given the opportunity to meet the reserve. If the high bidder declines, the seller will be given the opportunity to accept the high bid.) Sellers may not bid on their own lots.

**Minimum Bid:** There will be a minimum bid of \$10 (unless the lot is a donation to WARCI). An item failing to receive the minimum bid is a no-sale and remains the property of the seller.

**Payments:** Payments will be by cash or check only:

1. Payment by buyers will be by cash or check with proper ID (e.g. photo ID such as a driver's license) if pre-approved by a WARCI official at check-in when a bidder's card is purchased.
2. Payment to sellers will be by cash or check at WARCI's discretion. If a seller has left the auction, a check will be mailed to the seller (it is the responsibility of the seller to provide a correct mailing address to WARCI).

**Disputes:** The auctioneer will make every effort to ensure the orderly disposal of each lot. The auctioneer may, at his discretion, re-open the bidding if there is a dispute as to the amount of the final bid or if the lot is not as described or represented. WARCI reserves the right to void the sale of any lot that was purposefully misrepresented.

The auctioneer and auction coordinator are WARCI officials with the authority to make final decisions on behalf of WARCI on any questions or concerns arising during the auction.

**Donated Items:** Items may be donated to the club to be sold with no minimum bid requirement or reserve during the auction. WARCI reserves the right to reject or donations that it deems inappropriate for this auction. The general provisions of WARCI's Donation Auction Policy will apply (see page 3).

# Some Items that Will be Included in the WARCI Auction

1. Crosley XJ 1923 battery set w/ two good tubes, two duds.
2. DictoGrand Type R4 Horn Speaker, working.
3. Hickok Model 870 Dynamic Transistor Tester 1960.
4. Emerson DS-365 AM table radio.



7. Marlboro transistor novelty radio.



5. Philco 40-120 AM/SW Table radio.



8. Radio Tubes (7). Instant collection of display tubes, non working. QRS Red Top, Kellogg 401, WD-11, UX-199, C-201A, Arcturus Blue 80, Arturus Blue 124.



6. Nordmende Spectra AM/FM table radio from Germany.



9. Western Electric WE-540 cone speaker. working. new driver, new cord, new Buford cone.



# More Items that Will be Included in the WARCI Auction

10. RCA Radiola 103 speaker, working, original.



11. RCA UZ-1325 horn speaker, working, Original.



12. Radio Bank. Majestic console shape. original cast iron body and stamped metal back panel. working. no moving parts. just add money.



13. Tuska 300.



14. Thorola 57, working.



15. Globe 626.



16. Midwest Miraco Ultra-5, working.



17. Philco 46-350 Portable.

## Editor's Note:

*The WARCI News is your newsletter.*

Your comments and suggestions for the newsletter are most welcome.

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

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

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

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

In this issue we feature two articles on wireless on the Great Lakes. First, a short summary of the advent of Great Lakes wireless service and the story of the Big Storm of November 1913. We follow that with the stories told by a Great Lakes wireless operator in the article "Recollections of Levon R. McDonald", and we thank Brian Belanger, editor of MAARC's Radio Age, for kind permission to reprint it from the October 2006 issue of Radio Age.

We've gotten requests for restoration articles, and until you start writing them I will try to find good ones to carry.

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

Don't forget that we will have the first WARCI auction at the September meet. This will be an experiment to test the interest in such an auction (which has been strongly supported in our member poll and at meetings) and also to test the procedures we will use - there will undoubtedly be kinks to work out.

Thank you,

- Greg Hunolt, Editor, WARCI News

## WARCI Welcomes!

WARCI welcomes a new member:

Mike Krueser of Evanston, IL

We hope you enjoy being a WARCI member!

## Bob Paquette's Microphone Museum



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

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

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.

# Early Days of Wireless on the Great Lakes and the Big Storm of 1913

By Greg Hunolt

To set the stage for the next article, “Wireless on the Great Lakes – Recollections of Levon R. McDonald”, this article will summarize the early history of the advent of the use of wireless, i.e. ship-to-shore or ship-to-ship radio telegraphy (though there were some experiments with radiotelephony – voice communications), on the Great Lakes in the 1900’s and 1910’s, with the Big Storm of November 1913 as a centerpiece. What I find particularly notable is the resistance to the adoption of wireless, and to resistance to regulations that would require wireless, particularly on the part of freight shippers, despite some early life-saving successes.

In his article in *Inland Seas* (see references) Richard Gebhart notes that a 1901 edition of the *Railway and Engineering Review* contains the observation that “wireless telegraphy ... is considered superior to the use of carrier pigeons”. But, as Gebhart recounts, the use of wireless on the Great Lakes was not eagerly adopted by the shipping companies. In March of 1907 the *Cleveland Plain Dealer* quoted one Harry Coulby, president of the Pittsburgh Steamship Company, as stating that “The boats of the Pittsburgh Steamship Company are not and never will be equipped with wireless”. Some companies did adopt wireless, conceding its value for the safety of passengers, but not for freighters. But wireless did prove valuable for freighters – for example in September of 1910 the *Pere Marquette 18* sank, but not before a wireless message to her sister ship the *Pere Marquette 17* brought that ship to the rescue, and all hands were saved.

## Clark, United Wireless, and Marconi

The early history of wireless radio telegraphy on the Great Lakes was as turbulent as a Great Lakes storm (see Mayes and *AWA Review*, Kleinman et al.). Wireless service on the Great Lakes began in 1904 when the Detroit and Cleveland Navigation Company installed Thomas E. Clark’s wireless equipment on its steamers, following successful tests in 1903. Over the next few years Clark’s company became the Clark Wireless Telegraph & Telephone Company and opened and operated land stations in Milwaukee,

Buffalo, Cleveland, Detroit, Port Huron, Bay City, Ashtabula, Erie, Saginaw, and Toledo. Great Lakes shipping lines installed Clark wireless equipment, and in 1907 Clark’s system handled over 70,000 messages in one eight month period. In 1904, Lee DeForest’s American DeForest Wireless Telegraph Company installed stations at Erie, Pennsylvania and Cleveland, Ohio, and began competing with Clark. Things changed in 1907 when the United Wireless Telegraph Company took control of the De Forest company and launched a determined effort to drive Clark out of business by fair means and foul. There being no rules, United Wireless jammed the Clark company’s transmissions and resorted to sabotage of Clark land stations and predatory pricing. As a result, the Clark Wireless Telephone and Telegraph Company was out of business by the end of 1910. But the worm continued to turn. In 1911 the Marconi Wireless Telegraph Company sued United Wireless for patent infringement and ended up taking over United Wireless in July 1912. Thus in the eventful years of 1912 and 1913 the Marconi company operated a constellation of 55 land stations around the Great Lakes (50 of which were taken over from United Wireless) including stations in Minnesota (Duluth, Grand Marais), Wisconsin (Manitowoc, Milwaukee), Michigan (Sault Ste. Marie, Mackinac Island, Ludington, Calumet, Grand Haven, Benton Harbor, Holland, Grand Rapids, Lansing, Alpena, Detroit, South Haven), Illinois (Chicago), Ohio (Toledo, Cleveland), Pennsylvania (Erie), and New York (Buffalo) and about 500 stations on ships steaming on the lakes (400 of which were taken over from United Wireless).

See photos on page 13 of a shipboard wireless installation, and on page 15 of two land stations, from Mayes.

## Republic, Florida, and Titanic

The big event of 1912 was, of course, the April 12 sinking of the *Titanic* with a loss of about 1500 lives, though wireless was instrumental in the saving of 700 lives. (This followed the collision of the *Republic* and *Florida* off Nantucket Island in January 1909. As

*Early Wireless on Great Lakes - continued on Page 9*

recounted in Lovelace, wireless operator Jack Binns became a national hero for his contribution to the saving of 1,600 lives from both ships.) A consequence was the Radio Act of 1912 that included the statement "That from on or after October 1, 1912, it shall be unlawful for any steamer of the U.S. or any foreign country navigating the ocean or Great Lakes and licensed to carry, or carrying, fifty or more persons, including passengers or crew or both, to leave or attempt to leave any port of the U.S. unless such steamer shall be equipped with an efficient apparatus for radio communication, in good working order, capable of transmitting and receiving messages over a distance of at least 100 miles, day or night."

The Radio Act of 1912 did not cover Great Lakes freight steamers since most if not all sailed with crews fewer than fifty. In hearings on the Radio Act that were held in July 1912 by a senate commerce committee, one A.A. Shantz, vice president and general manager of the Detroit and Cleveland Navigation Company (the early adopter of wireless noted above), representing Great lakes passenger carriers, testified that lake freighters needed the same wireless equipment as used by many of the passenger vessels. This prompted rebuttal testimony by William Livingstone, President of the Lake Carriers Association, and Harvey D. Goulder, counsel for that association. Livingstone side-stepped the argument for wireless, suggesting instead that passenger boats of the Great Lakes be required to have steel deck construction. Goulder observed that "Instead of needing wireless to summon vessels to us we are endeavoring now to devise a method to keep them away from us, to avoid collisions. We can summon vessels at any time with rockets or whistles. We do not need wireless." The irony of this statement

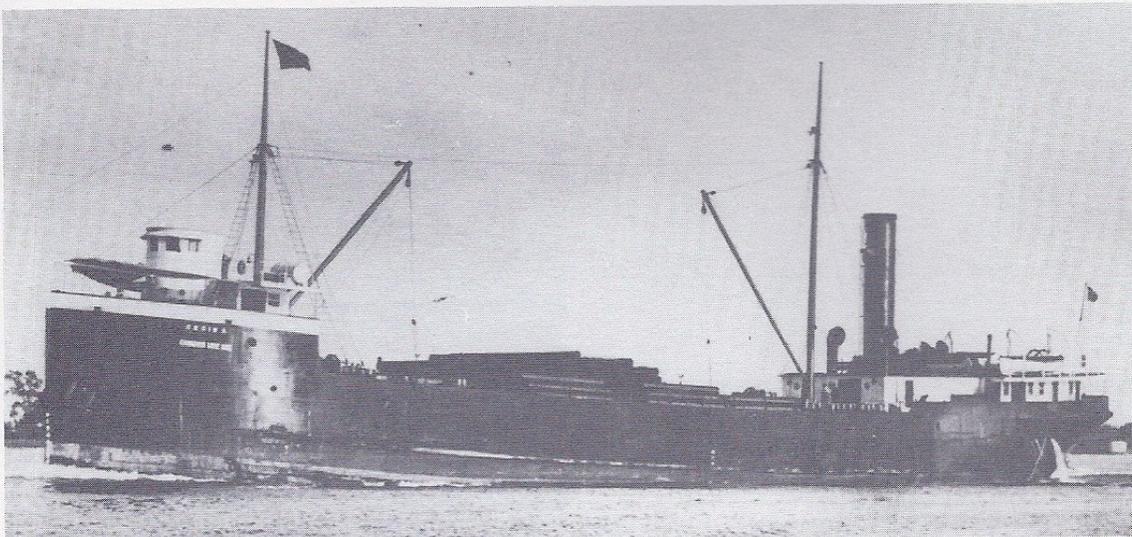
must have been keenly felt, in the light of the experience of *Titanic* just a few months earlier using rockets and whistles to try to summon a vessel in plain sight (that had turned off its wireless).

### The Big Storm of 1913

The year 1913 brought the Big Storm of 1913, from November 9 to November 10. Shelak notes that the storm was a low pressure system that tracked across the U.S. toward the east coast but instead of moving off the coast headed north to the Great Lakes, creating a unusually tight pressure gradient with a Canadian high pressure center to its west that accounted for the sustained high winds observed, over 60 mph for more than 16 hours across the lakes. The winds raised towering waves on the lakes, and the blinding snows and high winds knocked our communications, rail service, and lights across the region. Hardest hit were lakes Huron and Erie, where shoreline communities were buried in heavy snow. Shelak reports that 19 ships were lost, 52 damaged, with a death toll of 248, of whom 186 were from Cleveland.

The following is a contemporary account of the Big Storm, an article "Nineteen Wrecks Within a Month", from *Wireless Age*, December 1913, p236. Note that the count of ships and lives lost from this early article is lower than later confirmed.

*"In the story of havoc made by a storm that swept the Great Lakes for two days, leaving a trail of death and destruction, the Marconi system is shown to have scored another triumph by bringing aid to the vessels in distress and conveying information about them and those aboard. Starting on Sunday morning, November 9,*



The *Regina*, lost with all hands during the Big Storm of 1913. The wreck was located on the bottom of Lake Huron in 1986 (Inland Seas, Summer 1987).

1913, a gale that brought fear to the hearts of the bravest mariners lashed the waters of the lakes into huge waves. The blow was accompanied by a heavy snow which placed added hardship on the folks at the mercy of the storm.

Fifteen steamers were wrecked, including the thirteen listed in the table below and two unidentified steamers lost at Isle Royale.

Steamship Name	Company
Fulton	Pittsburgh Steamship Company
D. O. Mills	Pickands-Mather Company
Victory	Pickands-Mather Company
W. G. Pollock	Jones and Laughlin Steel Company
F. G. Hartwell	Tomlinson Company
H. B Hawgood	W. A. and A. H. Hawgood Company
J. T. Hutchinson	J. T. Hutchinson Company
J. H. Shadle	Cleveland Cliffs Iron Company
Matthew Andrews	H. Steinbrenner Company
L. C Waldo	H. H. Brown Company
Wexford	Western Steamship Company
Regina	Canadian Interlake Steamship Company
H. M. Hanna	M. A. Hanna Company

The Waldo is a total wreck, although the members of her crew were rescued. The Wexford was also wrecked, and her crew of twenty men lost their lives. The bodies of five members of the Regina's crew have been washed

ashore; the vessel is a total loss. The waters swallowed the Hartwell, but the members of her crew, it is believed, were saved. Recent reports from the scene of the disaster were to the effect that the Hawgood was aground and in danger of being pounded to pieces by the waves. Another victim of the storm was the government lightship No. 82, off Buffalo. She was completely destroyed and no information has yet been obtained to contradict the report that all of her crew perished. The other steamers mentioned in the list of wrecked vessels are aground, and it is likely that they will be prevented from foundering. The total life loss as a result of the disaster was about 100.

Not only on the water, but on the land was the value of wireless communication demonstrated. During the two days the storm raged there was not a telegraph or telephone wire leading out of Cleveland in operation, Marconi wireless being the only means of communication. The owners of the vessels equipped with wireless expressed considerable satisfaction with the Marconi installations, which enabled them to communicate their craft when word to and from the vessels meant so much.

There were few accidents to the wireless apparatus, although all of the wires in the antennae at the stations and on the boats were coated with ice. The ice and snow broke the halyards on the station on the Marconi Company in Cleveland, and shattered a mast on the steamer City of Buffalo. It also broke a block of the set on the steamer Western States. When the accident occurred at the Cleveland station the operators were sent to the school, where they transmitted and received messages. The damages to the outfits of the two steamers was quickly repaired."

Gebhart reports that the only bulk freighters on the



The capsized Charles M. Price, lost with all hands on Lake Huron during the Big Storm of 1913.

Great Lakes that had been equipped with wireless were those of the Shenango fleet, and that all of these ships, forewarned by wireless, stayed safely in port or quickly sought shelter. None were lost or damaged. Indeed, Shenango ships used their wireless to send messages to other owners notifying them of groundings and stranding of numerous vessels, for which they won praise from the U.S. Department of Commerce.

### **LaFollette's Seaman's Act**

In December of 1913, the House Committee on Merchant Marine and Fisheries held hearings on the bill proposed by Wisconsin Senator Robert M. LaFollette. His Seaman's Act was intended to "improve the lives of both seamen and the civilian population that sailed the lakes and seas." Gebhart reports that vessel owners loathed the provisions of the bill, including its proposed requirements for use of wireless. A contemporary account of the hearings on the proposed Seaman's bill appeared in *Wireless Age*, February 1914, p. 422, in an article entitled "Advocating Wireless for All Lake Boats":

*"Wireless for every steamer on the Great Lakes, passenger and freight, now seems to be the idea of the House Committee on Merchant Marine and Fisheries, before which the passenger steamboat men of the Great Lakes, the bays and sounds are laying their protests against the La Follette seamen's bill. This is indicated by the well-evidenced inclination of the committee so to amend the seamen's bill for all classes of steamers, saving, of course, river and harbor steamers, as to require a wireless outfit.*

*The questions asked generally by the committee show them to be in serious doubt as to the real value of the La Follette bill as a provision for the greater protection of life at sea. The committee is laying great stress on the danger of fire, and is permitting the vesselmen to bring out the fact that the measure championed by Senator La Follette and passed by the Senate makes no mention of fire protection or wireless.*

*The vesselmen are being questioned closely on both of these matters, and it is a general observation by the witnesses that fire is the thing most feared at sea. The vesselmen are unanimous that wireless is the thing imperatively needed on all ships. They put it: "What good is wireless on one ship if she is unable to communicate with other ships from which she might need aid?"*

*Several of the witnesses have declared that a general provision for wireless would be of far more effectiveness for the safety of life than any provision calling for "100*

*percent life boatage."*

*The passenger steamboat men of the Great Lakes have shown some reluctance to emphasize this subject. They have stated to the committee that they are passenger steamboat men, and not freight-boat men. They have insisted that they preferred to confine the discussion to their own boats, especially as the subject of protest has been limited to the safety provisions of the seamen's bill.*

*Full credit has been given the lake freighters for carrying 100% lifeboats at the present time. The passenger steamboat men insist that they have played more than fairly by the freighters and their operators, and they have insisted that as things stand the freighters will not have to make any changes in their equipment, even though the seamen's bill passes in its present form.*

*The committee holding the hearings seems to take the view that when it comes down to a question of real safety, fire should be given consideration, and the Congressmen seem inclined to act along this line, excluding the lakes, at least from the lifeboat requirements on the 100% basis and amending the bill further to take precautions against fire and to insist on wireless for all ships.*

*Testimony was given by A. A. Schantz, general manager of the Detroit & Cleveland Navigation Company. Schantz stated that all of the new boats of his line have carried wireless without having been required to install it by the Government. In conclusion he stated that the only things feared on the lakes are fire, fog, and snow. The passenger boats do not run in winter, and so are free from the perils of snow. Fog is met by slowing down and by constant fog whistling. Fire, he explained, is guarded against by the best fire preventive and fire-fighting apparatus possible to install, adding that "for further protection we believe that wireless for all steamers will give us greater protection than any other measure."*

The February 14, 1914 issue of *Wireless Age*, February 1914, p349, included the following report "Gold Medal For Operator", an ironic counterpoint. "Because of his excellent work at the key during the November hurricane in which so many vessels on the Great Lakes were lost, A. F. Moranty, wireless operator at the Marconi station at the Ashtabula (Ohio) plant of the Great Lakes Engineering Works, has been presented with a handsome gold medal by the Pickands-Mather Company. During the storm the Pickands-Mather Company lost three ships, while the fate of many others of the same company was uncertain for many days. Moranty was able to render the company valuable

service by keeping its Cleveland offices posted on the whereabouts of many of its ships. In fact, the Marconi wireless station was the only means Ashtabula had of communicating with the outside world for several days during the height of the storm."

*Wireless Age*, July 1914, p787, reported a "Bulletin on the Great Lakes". "The announcement that the daily wireless bulletin to vessels on the Great Lakes from the station at Arlington was to become a regular service was received with expressions of approval from all the vessel owners. The passenger steamships are now equipped with wireless and many of the package freighters and other cargo vessels carry installations. It is expected that many more vessels will now install wireless.

The service commenced on June 1, 1914, and weather forecasts are to be sent out each night, shortly after ten o'clock, including barometric pressure, direction of the wind, and the force of the wind on the Beaufort scale.

Weather forecaster Cuthbertson, of Buffalo, stated on the opening of the wireless service "I regard the system of wireless transmission of weather messages to mariners on the Lakes as the greatest improvement in the Weather Bureau in the last twenty years. Mariners from Duluth to the St. Lawrence River whose vessels are equipped with wireless apparatus will be able to receive weather reports and storm warnings while far out in the Lakes, and will be able to plan accordingly. There is no doubt that the new system will prove a tremendous factor in making travel on the Great Lakes as safe as human ingenuity can make it."

But, of course, in order for this new service to be of help, wireless apparatus was needed on board ships to receive it. But Gebhart reports that when the Seaman's Act became law in 1915 use of wireless telegraphy on all vessels was not a mandatory provision of the bill. He notes that while wireless was gradually adopted by

freight shippers, as late as 1929 two steamers, the *Andaste* and the *Milwaukee* vanished on Lake Michigan with all hands – and that neither of those steamers had been equipped with wireless.

It is easy to look back and say that if all of the ships operating on the Great Lakes had installed wireless as soon as its practicality was demonstrated that a considerable number of lives, ships, and cargo would have been saved in the early decades of the twentieth century. Rather than point fingers back, maybe what we should do is look around now to see what things we could be doing but are not doing that will lead to folks a hundred years from now looking back at us with a critical eye.

References:

"Nineteen Wrecks Within a Month", *Wireless Age*, December 1913, p236.

"Gold Medal For Operator", *Wireless Age*, February 1914, p349.

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The steamer *William Nottingham*, driven aground during the Big Storm of 1913, *Inland Seas*, Fall 1988.



# Early Wireless on the Great Lakes

## Recollections of Levon R. McDonald

*This article is reprinted from the October 2006 edition of Radio Age (the monthly publication of the Mid-Atlantic Antique Radio Club), with the kind permission of Radio Age editor Brian Belanger. Our thanks also to Ludwell Sibley who provided the original material to Brian and kindly gave his permission to WARCI to reprint it here. The Editor's Introduction is Brian's.*

### Editor's Introduction by Brian Belanger:

The material in this article was taken from articles in the Spring 1961 and November 1961 issues of *Keeping in Touch*, the newsletter of the "Dynamic City" (Detroit) chapter of the Morse Telegraph Club. Thanks to Ludwell Sibley for providing this material! The crudely typed newsletter distributed to club members included a "recollections" column written by old-timers. Levon McDonald was the club historian, and produced the recollections reprinted below. In reproducing this material minor changes in punctuation and style have been made to improve readability. (Comments in the article attributed to "editor" are from the *Keeping in Touch* editor, not the *Radio Age* editor.)

Today all hams use the Continental or International Code. As noted in the article, the original American Morse Code used by some land-line telegraphers was slightly different.

In the first two decades of the 20th century, telegraphers who had worked for Western Union or the railroads sometimes took jobs at land-based wireless stations or as wireless operators aboard ships. A small number of companies established wireless stations on the Great Lakes, e.g., the Clark Wireless Telegraph Company and the United Wireless Telegraph Company, and a number of shipping companies installed radio equipment on their ships, including the railroad car ferries noted in this article that crossed Lake Michigan often. Relatively little has been written about early wireless on the Great Lakes. Most wireless historians have concentrated on trans-Atlantic wireless (Marconi, Fessenden, Telefunken, Homag, etc.) Thorn Mayes' *Wireless Communication in the United States*, published in 1989 by the New England Wireless and Steam Museum, is one of the few books that includes information about wireless on the Great Lakes.

### Recollections

by Levon R. McDonald

In many ways the old wireless operator was "just another brass pounder." But to the captain of the ship he was also sometimes known as ship's electrician. And on quite a few vessels he was known as a deck swabber. It was considered uneconomical to keep a man on board just to send a few messages. In fact the ship probably wouldn't have an operator at all were it not for the "Ship Act," that "radical" piece of legislation fathered by the Senior Senator Robert LaFollette, requiring that ships of certain tonnage and/or carrying passengers must have a licensed radio operator man aboard.

Wireless operation—later known as radio and today as electronics—was full of romance in the old days. Possibly as much so as Morse, although I doubt if many purely dyed in the wool wireless operators would see anything romantic about just pounding an ordinary land wire key for a living. Only those in each tribe will know what I am talking about.

Wireless operating more often than not meant going to sea, sometimes at a tender age. Any person, telegrapher or otherwise, who has made his living on the oceans of the world will not find it devoid of excitement and adventure—especially the very young.

To obtain this magnificent job it was first necessary to obtain a radio telegraph license, second class. After a year of successful operating, one became eligible for first class, provided he had reached the age of 21. In the old days they also had a radio telegraph extra first class license, obtained after still more experience and a Federal examination. The latter is no longer issued.

Originally, that is at the very beginning of practical wireless, no license was needed and operators were recruited from the telegraph companies and used American Morse. The fiasco in connection with the

*Levon R. McDonald - continued on Page 14*

sinking of the Titanic and the Radio Act of 1912 turned the tide in favor of International—also called “Continental” code. This actually was a good thing, especially for copying through heavy static. The Morse-spaced letters like C, O, R, and Y gave some difficulty. Also it meant that ships of all nations could copy each other.

To obtain a license was not easy, nor is it easy today. It required many, many hours of study of electricity and difficult circuit diagrams had to be memorized complete to the last detail.

As radio art advanced, more and more operators were recruited from the ranks of amateurs, who often could pass the technical phases of Government examinations easier than some of Morse operators, but they did have a problem with the code, comparatively speaking. The amateurs had the advantage of having built their own equipment. In fact, they often invented new equipment superior to the commercial type available. It would be difficult to find a more ingenious group of people than the early radio amateurs. The literature is full of examples of their accomplishments. And, it should be noted that most commercial operators had a ham station at home where experiments could be made—not possible in the commercial stations.

There have probably been as many different kinds of operating jobs in radio telegraph as in Morse. Probably the most important was and still is the ship-to-shore and ship-to-ship telegraph. The development of marine telegraphy was unquestionably a great boon to humanity. Ships might still be sunk at sea, but not lost without a trace. Most times the passengers and crew were rescued. Also, it gave the ship owners tighter control and supervision over their properties and the captain was seldom without advice from the big boss. Surprisingly, this was resented by some captains—it lessened their authority and this may have been the reason why many of the “Sparks,” as they were called, had to wash down the decks. Later many reforms took place and the radio operator became one of the ship’s officers and ate in the officers’ mess and did a better job of attending to his duties as a link between the ship and the rest of the world.

Editor's note: Hundreds of radio officers are organized under C.T.U. [Commercial Telegraphers Union] today and receive salaries ranging from \$600 upward, plus fringe benefits.)

Standard wages for wireless operators on the Great Lakes was \$40 a month in 1919 including room and board. I have no figures on ocean-going vessels of that

period. Probably the wages were not much higher. Ann Arbor railroad ferries with headquarters and land station at Frankfort, Mich., paid \$125 a month. Besides the ship stations, they also maintained land stations at Manistique [Michigan] and Manitowoc [Wisconsin]. The reason for the higher wages was that the radio man also served as purser. The C&O Railroad (then the Marquette Railroad) also had car ferries radio stations and I believe their wages were similar. The word around the Lakes was that these were the best jobs.

Early ship operators were not particularly noted for fast code. One reason was inefficient equipment. Breaking 110 volts at several amperes with a heavy telegraph key is not conducive of fast sending. Also the receiving operator used a crystal detector and



A United Wireless shipboard installation circa 1910's, with the first woman operator.

headphones without amplification. It was unlawful to use vacuum tubes, even after they became available because of patent rights. Radio licenses could be

revoked for violation of this rule. [It was not unlawful to use vacuum tubes, the concern at the time was purchasing tubes from companies that were in violation of patent rights. - BCB] The marvel today is that communication was possible at any speed. Repeating a word more than once was common practice. In the early '20s spark telegraphy gave way to vacuum tube CW transmitters and tubes were allowed in receivers and things were much better for the operators, including wages, and greater transmission and receiving speed was possible.

Another operating job was known as "point-to-point." This was a job where any good commercial Morse operator would feel at home—in fact many did. This was a fast message service—putting a premium on how many messages you could handle in a given time, although I do not recall hearing of "bonuses" being paid. But in speed and efficient operating it was the equivalent of a good fast Morse wire. In the 1930s the code was often sent from perforated tape and recorded on ink slips at speeds of 200 w.p.m. or more. The receiving operator copied visually from the wavy line on the tape and 60 w.p.m. was considered an average speed for transcribing onto the message form.

Many of the circuits were connected to overseas stations, but some were used domestically. For instance, the Inter-city Radio Co. operated from the Book-Cadillac Hotel in Detroit with Cleveland and other cities. There were loops from the hotel to business offices and the messages were sent direct onto the radio circuit without relaying. In the '30s RCA had a point-to-point service from Detroit to New York with the transmitter on the Marquette Building and the receiving station in the lobby of the Western Union on the Shelby Street side. After World War II the government ordered domestic point-to-point discontinued because the wire service was adequate and the ether was getting too cluttered up with too many stations.

Still another radio telegraph job was the police department's zone and inter-zone radio telegraph circuits, the latter operating nation-wide. Police bulletins covering stolen cars and wanted criminals were transmitted and all sorts of police messages handled. These men were very fine operators, often working at high speed. I say "was" because police Teletype probably has taken over in most cases.

The early wireless operator was a man of many parts. As with Morse, many never had much formal schooling, but due to the technical nature of his vocation, he was forced to educate himself, and as the science became more complex he tried to keep up with it. He had the great advantage of much leisure time standing his watch on a ship and some of the ambitious ones spent their time studying and improving themselves. One friend of mine, Captain Mantell of the old D. & C. Navigation Co., started as an operator. Another, a Mr. Kirk, started as a radio operator on a Danish ship and held licenses from the English, Canadian, and finally, the U. S. governments. He studied navigation in his spare time, and the last time I saw him during World War II, he was chief chemist for a company in Iowa which makes hundreds of products from corn stalks. He had studied chemistry in his spare time after he became a ship's captain.

It was only natural that many operators gravitated into the broadcast engineering field. It was very natural, because in the '20s a radio telegraph license was required to adjust broadcast station equipment. Later a radiotelephone license was issued, but the original required license was radio telegraph. Radio marine operating was an ideal training ground for the early broadcast technicians and engineers, and it gave the men a chance to live at home and the pay was somewhat better than ship operating.

Before closing I should mention the hotel wireless stations. Very shortly after wireless communication became practical, some of the leading hotels put in their own radio telegraph stations to handle messages and reservations for guests. As I recall most of these operators were American Morse operators and American Morse was used. I do not remember the names of the hotels using the service but there was at least one in Detroit and one in Kalamazoo and no doubt in other cities. I do remember that when I arrived in Kalamazoo May 1, 1920, to relieve Jimmy Thorne at the A. P., he pointed out a big antenna atop the leading hotel and told me that it had been used for the hotel radio telegraph station.

From the above account one might be led to believe that your historian had spent many happy hours on the briny deep. It is with regret that I must set the record straight. I have operated amateur radio stations since 1914 and got my first ham license in 1922, obtained my radio telegraph 2nd and radio telephone

first in the early '30s. However, my actual seagoing experience was limited to a few excursion trips on the lakes where I was the operator on duty, mostly under Captain Mantell of the City of Cleveland III. I also worked a few tricks at WFK at Frankfort land station under Ferris McKesson of the Ann Arbor car ferries. I also worked in a few broadcast stations in my spare time. I still hold a valid amateur extra first class, radio telegraph 2nd, and radio telephone first class license. I did spend many hours in the radio shacks aboard ship from 1919 on, however, often spending an entire trip with the radio operator.

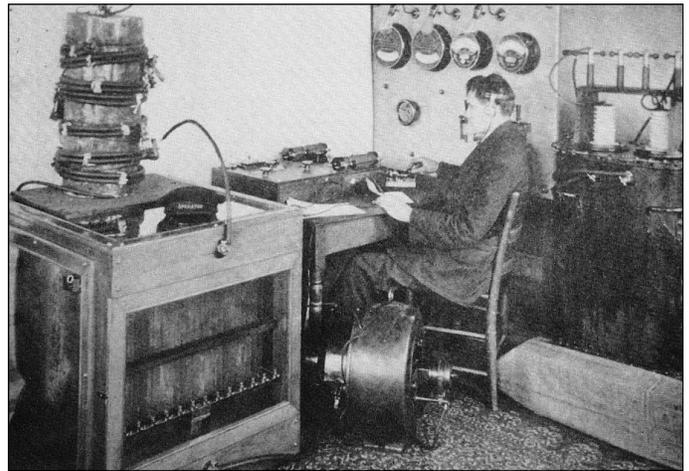
Most of the early ship operators still living are operating amateur stations today and they have many lively stories to tell. You will find quite a few still employed, some of them working on advanced design projects.

Keeping in Touch Editors note:

It was your editor's privilege to have been working second trick at Frankfort with Hank Workman on first trick and Sam Potter on third trick in 1911 when the wireless was installed there and on the car ferries. We were the railroad operators but doubled up and manned the new wireless station (VO at that time) using the old Morse Code. There were three ferries, manned by Claude Caldwell on the No. 3, Jack Smith on the No. 4, and Tommy Arnold on the No. 5. We were all paid \$50 per month, but the lads on the boats had their room and board free. They also took the purser's job away from the Captain so he could have more time to loaf. We land operators adjusted our crystal sets on the hour and half-hour to catch any reports the boats might have for us. Your editor later spent a few months on the No. 4 under Capt. Larsen, and treasures a wealth of pleasant memories and interesting tales of life as it was lived fifty years ago in Frankfort, the most beautiful little village in Michigan.



The Clark wireless station at Ashtabula, Ohio



The Clark wireless station at Buffalo, N.Y. (About 1910). The original call was CB. Later United Wireless owned the station, and eventually American Marconi took over this (with a new call, BF) and other United Wireless stations.

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**RICK HAGERTY**  
 PRODUCER-HOST  
[ricksradioroots@yahoo.com](mailto:ricksradioroots@yahoo.com)

# WARCI Radio Services

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

Name	Email	Telephone	Service Available
Dwight Church	(none)	414-545-6972	Radio repair – electronics only.
Bill Engaas	craftyradio@earthlink.net	262-786-8183	Speaker Repair.
Ralph Larsen	radioralph@hotmail.com	414-278-7981	Repair, including Television.
Mike Lewis	deepheart@att.net	608-835-7193	Repair, restoration, training.
Dave Milke	wb9egz@gmail.com	608-838-9661	Parts, tubes, and free advice.
Greg Hunolt	ghunolt@excel.net	920-893-0422	Research, especially on 1920's radios.



## A University Professor Lectures to the Whole Midwest

On the principle that the citizens of the State of Wisconsin who support the University of Wisconsin are entitled to such privileges as the institution can extend to them, the officers of the university are carrying on "certain forms of extra-mural teaching" by means of radio broadcasting. This picture shows Professor Alfred B. Haake delivering a talk on economics. Some of the lectures have been heard as far west as the Rockies and as far east as New England. [Popular Radio, July 1922]

# News from the Neighboring Clubs

## ARCI

Antique Radio Club of Illinois

[www.antique-radios.org](http://www.antique-radios.org)

Radiofest 2011 was another big success for ARCI, with a vigorous auction conducted by Jim Sargent, excellent weather for the flea market and a good turnout. The program speakers and discussions were well received, and the display of ham equipment was amazing.

**Next Events (see ARCI website):**

**October 2, 2011 - 7:00AM - 11:00AM**

Outdoor swap meet. Business meeting and election of officers for 2012.

American Legio Hall, Carol Stream IL

**December 11, 2011 - 7:00AM - 11:00AM**

Indoor Swap Meet

American Legion Hall, Carol Stream IL

## NARC

Northland Antique Radio Club

[www.northlandantiqueradioclub.com](http://www.northlandantiqueradioclub.com)

Although the Radio Daze 2011 flea market was curtailed by rain, the auction led by Frank Rasada was a big success, the presentation by Don Patterson on Grebe and Grimes was excellent, and the meet overall was great to be at. There were 219 lots in the auction, including three very nice Scotts and a wide range of other good sets, including battery sets (e.g. Federal 57, Crebe CR-9), and radio related items.

**Next Events (see NARC website):**

**Sept 18** - Annual Meeting, 12:00 Noon, at the Pavek Museum of Broadcasting. With swap meet.

**November 5** - Fall Swap Meet

**February 2012** - Radio Workshop

**Radio Daze 2012 - May 18-19, 2012.**

## MARC

Michigan Antique Radio Club

[www.michiganantiqueradio.org](http://www.michiganantiqueradio.org)

Extravaganza featured the usual fine flea market (with a nice selection of early gear that your editor looks for). Interesting discussions at the programs, the Tube Collectors' Association meeting and the auction conducted by Rich Estes were other high points.

**Next Events:**

**October 15, 2011 - Fall Meet, Kalamazoo MI**

**January 25, 2012 - Winter Meet, Farmington Hills, MI.**

**Watch the MARC website for details.**

## Wisconsin Radio Association

In connection with the fifth annual food, household, and electrical show at Milwaukee Auditorium, Milwaukee, October 15-21, 1923, a radio exposition will be held under the auspices of the Wisconsin Radio Association.

The Radio Association, through the courtesy of the Milwaukee Journal, has eight booths to devote to the radio show in the electrical section. The exhibit will consist of a broadcasting station, giving daily programs; a large broadcasting map, twenty-five feet wide, indicating by lamps the various broadcasting stations; a series of tableaus suggesting the uses of radio, and an information booth.

The exhibit will be conducted on an educational basis, keeping the actual makes of radio sets in the background and bringing out strongly the idea of radio and its desirability. Nothing will be sold at the exposition and commercial exhibits of radio apparatus will be excluded. The Milwaukee market has never been sold on radio, and this exhibit, it is hoped, will be a big step toward that end. [Radio Topics, October 1923]

# Scenes from the July 17, 2011 Swap Meet



Barry Janov and Dennis Schrantz talking mikes.



Jim Menning making a sale on a summer morning.



Stan Broome with a rare bird!



Sets for sale in the flea market.



John Marker's communications receivers for sale.



The general scene at the WARCI meet.

## Classified Ads

**HELP NEEDED:** Would like to contact owners of 1920's battery sets, literature, and equipment made by Globe Electric Company of Milwaukee, WI, to survey existing model types and variations for development of a company history. All responses will be kept confidential. Thanks.

Glenn Trischan, P.O. Box 240022, Milwaukee, WI 53224. E-mail: [gnets142@att.net](mailto:gnets142@att.net).

**WANTED:** Any set made in Plymouth, WI, by the Plymouth Radio and Phonograph Co.

Greg Hunolt, N5412 State Hwy 57, Plymouth, WI 53073, Email [ghunolt@excel.net](mailto:ghunolt@excel.net) or 920-893-0422.

**SERVICE:** Michael Lewis – Radio Repair / Restoration and Training. You can hire me to restore your antique radio, but why not hire me to teach you to do it yourself? I've been teaching people how to electronically restore antique radios for over 30 years. I've assembled an incredible supply of parts, literature, and test equipment over more than 40 years. With two long-term students already, I've recently retired from my day job to devote full time to my antique radio restoration business. Whether you need just one session for some help on a "tough dog" or want to learn over the long term how to restore radios, I'm available through the end of 2010 at an introductory rate of \$15/hour, and able to make available to you the facilities described below.

At your command: test equipment including digital and analog multi-meters, high and low voltage bench power supplies, AF and RF generators, and much more. Also a large stock of parts including 50,000 vacuum tubes, and a comprehensive technical library spanning the 1920's-1980's, including the Riders and Gernsback manuals, and Sams Photofacts, and various factory manuals.

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

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

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

The cut-off date for all newsletter material is about the 15th of the month preceding publication of the next newsletter (e.g. December 15, 2011 for the January, 2012 issue). Send ads by email or letter to Greg Hunolt, WARCI News, at [ghunolt@excel.net](mailto:ghunolt@excel.net) or N5412 State Hwy 57, Plymouth WI, 53073.

