



IARCHS News

Iowa Antique Radio Club & Historical Society

Fall 2003

IARCHS Activities this last quarter AND plans for the next.

Dave Perkins

RadioDaze Program Update

On Sunday November 16th I met with Barb Feller, of the Linn County History Center along with a half dozen volunteers (mostly college students) to go over a proposed program and design of a simple crystal set for grade school aged guests to build during the upcoming RadioDaze program. My original design which used a piece of PCV drain pipe and a hack saw blade or piece of steel packing strap worked OK. But, at the request of Mrs. Feller, I had to update it a bit to align with a story about some of the very early designs of Art Collins (of Collins Radio fame) and increase the Linn County tie in. So here you have "revision B":



The RadioDaze display is now set to open on February 20th. The historical society could still use some radio related items of Iowa origin for their display. They'd especially like to have items tied to the Cedar Rapids / Linn County area. Members with items they'd like to share can contact me or Barb Feller at the History Center (319-362-1501)

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Area Code 563 Regional IARCHS Meeting report

Several IARCHS members from the Dubuque Area and beyond met 10/8/2003 at the home of Doug Spyrison. Attending were Doug Spyrison, Jerry Lange, Jack Sweeney, Jim Coohy, Jim Moran, Fred Sear, Duane and Wanda Kamp.

Old Business: Jerry Lange called for volunteers to host the local area meetings. The schedule will be published in the IARCHS newsletter. In response to club interest, some meetings will be held on Friday or Saturday to accommodate out of town member participation.

Next Meeting: The next Dubuque regional meeting will be held Friday at 7PM on Dec 5th at Jack Sweeney's place. (**Editor's note: this is a change from the previously announced date of December 3 to make it easy for out of town members to attend.**) The address is 321 Olympic Hgts. Dubuque. Also maybe we will continue the "Show and Tell" theme for this meeting. Anyone from out of the area that might

plan on attending the meeting could call Jack at (563) 588-1831 or email Jack at mrradio3@mchsi.com for more complete directions to his house.

New Business: Duane Kamp asked if the club might be interested in expanding its participation in either or both a May 26-29, 2004 Antique Power/Tractor swap meet and/or the Antique Power Show itself, July 16-18, 2004. The Power Show already has an associated flea market which should lend itself well to the addition of antique radio swap/sales meet. The show is organized and put on by Duane Kamp and his Antique Power group so little additional manpower would be called on from the club. The club has not participated in any swap meet style activities since the annual Dubuque Radio fest dissolved after the 1998 event. It was felt that the club should renew its support of a swap meet and the organizational difficulties would be minimized by latching on to an organized gathering, especially one that draws people interested in nostalgic technology. There appeared to be an unofficial consensus to try and promote and participate in the July event as an Antique Radio display/IARCHS promotion and swap/sales meet.

Show and Tell. Fred Sear brought a Zenith 835 tombstone he found recently at a household auction. The chrome insert had been re-chromed and the wood case was under careful restoration by Jim Coohy. The chassis, recently restored to working condition by Jack Sweeney, presented an interesting dilemma. It wasn't the typical factory chassis with crinkle finish, it was chrome plated and appeared custom fabricated but had all the correct controls and tubes and some cans were curiously marked "for test purposes" or some such wording. Speculation was it may be a prototype chassis versus a time consuming rebuild by a technician with time on their hands. A Jensen speaker was included which could be original. This model radio appears on the cover of one of Mark Stein's radio guides and is quite valuable in good condition.

Jack Sweeney set up and demonstrated a small AM transmitter he assembled from a kit. Power is supplied by a small wet cell battery with program supplied by a CD/MP3 player. Jack tells us he can listen to his old radio programs anywhere in the house with the transmitter going. I believe Dave Perkins has one of these and used it at last summers' IARCHS displays. Jim Moran demonstrated a working Weltron "Space Capsule" or space ball radio/ 8 track

player. Looks just like a space helmet. He also brought the matching B&W TV . There is an active eBay market for these nostalgic 60's/70's items.

Jerry Lange brought an auto dealer's Motorola tube radio flip chart for use early in the car radio era when each vehicle's radio installation was different. All sorts of vertical, horizontal installations were pictured and described. Doug Spyrison displayed a WW 2 "Handie Talkie" BC-611, one of the earliest hand held receiver/ transmitters. It was produced by the Galvin Corporation, now Motorola. It uses 5 tubes with crystal control of the receiver and transmitter using Amplitude Modulation. With both batteries the unit weighs 6 lbs and has a one mile range. Hope to have a pair of these operating at a future meet.

Submitted by Doug Spyrison

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Dues Notice

As published in the minutes of the 4/4/03 IARCHS meeting, \$10 yearly dues have been reinstated beginning with the 2004 calendar year. Your dues status is noted on the mailing label of each newsletter, the date indicates which year your dues are paid up through. Most of us have 12/2003 noted on this newsletter.

Mail your \$10 dues check to the IARCHS treasurer:

Doug Spyrison
1295 Grove Terrace
Dubuque, IA 52001

To accommodate the usual Marshalltown auction goers, **the final Dues due date is April 3, 2004.** I don't want to lose a single member. However, as a practical necessity, I will ask the members present at the anticipated 4/2004 IARCHS meeting to act on whether non paying members should continue to receive newsletters. This is necessary to reduce the newsletter cost of persons no longer interested in the club. I sincerely hope everyone will choose to remain in the club and mail in their dues. **ALSO PLEASE SEND ME YOUR CURRENT PHONE NUMBER AND EMAIL ADDRESS TO UPDATE THE CONTACT LIST.**

Doug Spyrison, IARCHS Treasurer



IARCHS Contacts & Commitment

President	Jerry Lange, 790 Kane St. Dubuque, Ia 52001 Crimclov@mwci.net 563-556-3050
Treasurer	Doug Spyrison, 1295 Grove Terrace Dubuque, Ia 52001 Dougspyrison@mchsi.com 563-588-2713
Secretary	Dwight Baker 2626 NW 17 th st. Ankeny, Ia 50021 Vtaudio@hotmail.com 515-965-0999
Newsletter	Dave Perkins, 2608 C Reed Ave Marshalltown, Ia 50158 Dave@daveperkins.com 641-752-3417

IARCHS is a not for profit club whose purpose statement (as given in the club by-laws) is:

- 1) To provide an organization for collectors and historians of wireless, radio, television and other similar items.
- 2) To promote acquisition and preservation of biographical, technical and historical data, through the collecting of radios, stories, photographs, literature and other related items, particularly with respect to the inventors and early radio pioneers of Iowa.
- 3) To educate and enrich the public knowledge about the historical and cultural significance of radio by means of lectures, discussions, publications, workshops, displays and presentations.
- 4) To encourage and assist individuals in their preservation and restoration of radio and television related items to a condition consistent with the original intent of their manufacturer.
- 5) To create and foster an interest in radio history.

The **IARCHS News** newsletter is published and distributed (more or less) quarterly to all members of record and to similar clubs and organizations at their request.

MEET YOUR FELLOW MEMBERS

As noted in the meeting minutes those of us who participated in the last two board meetings think it would be good for the club to have some informal meetings hosted by various members in different regions of the state. It would be particularly useful if someone from the Western half of Iowa could find a time slot where those who could make it to their area could gather. If **any** member would like to host such a get together, please contact me (Dave Perkins) with the date, time & directions.

Here is the latest set of announced regional meetings for Eastern Iowa, they are:

December 5, 2003 @7:00 pm
Jack Sweeney
321 Olympic Heights Rd.
Dubuque, Iowa 52001
Phone 563-588-1831
email: mrradio3@mchsi.com

PLEASE NOTE THAT THIS FIRST ONE IS A CHANGE FROM WEDNESDAY THE 3RD TO FRIDAY THE 5TH AND THAT OTHER MEETINGS HAVE BEEN SET FOR FRIDAYS AS WELL.

February 20, 2004 @ 7:00 pm
Jerry Lange
790 Kane St.
Dubuque, Iowa 52001
Phone 563-556-3050
email: crimclov@netins.net

April 21, 2004
Jim Coohy
406 Clarke Drive
Dubuque, Iowa 52001
Phone 563-582-2267

June 11, 2004
Jack Sweeney
321 Olympic Heights Rd.
Dubuque, Iowa 52001
Phone 563-588-1831
email: mrradio3@mchsi.com

August -- 2004 open yet to be decided

October 13, 2004 @7:00 pm
Doug Spyrison
1295 Grove Terrace
Dubuque, Iowa 52001
Phone 563-588-2713
email: dougspyrison@mchsi.com

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Items Wanted / For Sale

AVAILABLE FREE OF CHARGE: A PHOTOCOPY OF THE SCHEMATIC DIAGRAMS FOR YOUR ANTIQUE RADIO FROM THE OLD RIDER AND SAMS MANUALS, AVAILABLE TO IARCHS MEMBERS COURTESY OF JACK SWEENEY, 321 OLYMPIC HEIGHTS, DUBUQUE IA 52001 . ENCLOSE MAKE AND MODEL NUMBER AND A 4x10 SELF ADDRESSED STAMPED ENVELOPE

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LARRY'S RADIO REPAIR: \$20 MINIMUM LABOR, YOU PAY FOR PARTS AND UPS SHIPPING; FAST TURN AROUND. CALL LARRY MOSER 303-742-2165

Ad Policy: Ads up to 100 words in length may be submitted by IARCHS Members and are free of charge. You may request your ad run up to 3 issues, if you don't specify it will run one issue, you may resubmit your ad. Submit your ads by mail or e-mail to the editor. Issue Deadlines: March 1, June 1, September 1, and December 1

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Editors' Column: Dave Perkins

As I type this (well... hunt and peck it) the Thanksgiving turkey has not yet felt the heat of the oven, but we're threatened with snow. So regardless of the calendar, it seems the indoor season (call it what you wish) is upon us; and that's a *good* thing if your project list is as long as mine. No mowing, no painting, just me, a cat or two, a glass of homebrew (or two) and boxes and boxes of old "good stuff" to play with.

Actually, if the truth be told, as mentioned in the lead article, I've been happily playing with crystal sets for a few weeks now thereby reenacting a piece of my childhood (a state that some dispute I ever completed – but, hey, let `em write their own column). In addition to the work with the Linn County group, I've been gearing up for a series of presentations to school kids and, as so often happens with this hobby, while researching the history of early detectors for these

school demos, I came across a few things that resulted in a few more projects being added to my list. At least one of those I plan to have for "show and tell" at Jack's place on Friday December 5. Did you ever wonder if you could build an FM crystal set? Well come check it out.

I am still playing with another little side project: a really cheap low power AM transmitter you could use to play old programs through the working pieces in your collection. The results of my bread board testing have been so encouraging that I've sketched this out in the "tips and tricks" column for those who wish to experiment.

I've also just learned some interesting points regarding the history of a couple of the older Iowa based radio stations. Bill Allen, IARCHS member from Eldridge, wrote me a note that, among other things, mentioned a common misconception that he (and I) had about WOC in Davenport: many people know that their call sign stands for "World Of Chiropractic" so it's widely assumed that the Palmer School of Chiropractic that owned and operated WOC back in 1922 applied for the original license. In fact, Bill reports, the Karliowa Radio Company of Rock Island, Illinois was granted the license and call sign on February 18, 1922 and they sold it to Palmer a month and a half later on April 4th.

Along those same lines, while I was visiting with the folks at the Linn County History Center I mentioned that I'd never heard what the call sign for WMT stands for, if anything. It turns out that the original license, which was granted in October 1922, was assigned call sign WJAM. That station was purchased by Harry Shaw in 1926. Mr. Shaw moved the station's operations to Waterloo where he owned a newspaper, the **Waterloo Morning Tribune**. He applied for and was granted the call sign WMT. Then in 1935 after the Cowles group bought the paper and station, they moved the station's operations back to Cedar Rapids along with the call sign. So, to this day, one of the remaining pioneer stations in Iowa is named in part for a city it has not occupied for almost 70 years.

I hope you all have a great & joyous holiday season.

Dave

Tips and Tricks

This issue's tip is something that your newsletter editor stumbled upon while searching for a source of inexpensive crystal set parts. A Google search lead me to a really great web site that has many low cost science projects for people to work on with their children or grandchildren. If you use the internet and are interested I'd suggest you check out www.scitoys.com. Among their radio related projects is a scheme for a transmitter that seems so simple that I doubted it would do much more than make some noise over your radio to demonstrate the principle of transmission. But I decided to try it in case it worked well enough to use as another school demonstration project. While I am still tinkering in an attempt to get the optimum modulation from the typical low impedance headphone jack on a CD player, this little trick seems to work well enough that I think anyone could use it to play vintage program material with sufficient clarity to show off the working radios they have in their collection.

The heart of this nifty little transmitter is a crystal oscillator of the sort that's used in any number of digital devices. These cost between \$2 and \$3 through Allied, Jameco or similar outlets. I used a 1 MHz part but any part whose frequency falls into the broadcast band will do. While they're specified to operate with a 5 volt supply that's actually only important if the oscillator is to interface with 5 volt logic. In fact their output level is controlled by the supply voltage and they're made with a CMOS output driver that will tolerate 10-12 volts or higher; taking advantage of this undocumented feature is the key to this design. The only other part you need is a small audio transformer whose secondary side is put in line with the power source for the oscillator (a 9 volt battery in this case). By driving the input (primary) side of the transformer with an audio source you can force the supply voltage to the oscillator to vary at an audio rate with the result that its output looks and acts like an amplitude

modulated signal at the oscillator's basic radio frequency. The design on the SciToys site calls for using a cheap small transformer from Radio Shack with a 1 K ohm primary (input) and an 8 ohm secondary that's in line with a 9 volt battery. I tried exactly this set up with a 1MHz CTS oscillator (CTS model MXO45-1.000MHz) and found that the output was clear but not very loud when driven from an 8 ohm headphone / speaker output; the signal was under modulated. I didn't have anything else handy, so I swapped the primary and secondary of the transformer (tying the 8 ohm side to the headphone jack and powering the oscillator through the 1 Kohm side). This substantially increased the volume but I found if you drive it too hard it clips then, pretty quickly, it locks up the oscillator output so that you have to switch the power off and on to get it to start up again. I suspect the original design would work well if driven from a higher impedance source such as a stereo pre-amp, but I have yet to test that and as of now I'm still scrounging for a tapped transformer that will let me experiment with what ratio might provide good volume from an 8 ohm source without overdriving the oscillator.

While its power output cannot be over a few milliwatts, I found that a few feet of wire on the output pin would send a clear signal around the room. With the negative terminal grounded and the output tied to my long wire antenna, it transmitted around my yard. If you want a cheap transmitter to play with here's an approach that requires only 4 parts including the audio jack and battery clip:

The \$10 AM transmitter