

W0GQ

W0WSV



Since 1949

BANDSPREAD



Associated with Linn County Emergency Management Agency and the ARRL

CEDAR VALLEY AMATEUR RADIO CLUB

Thursday, May 8th, 2008

7:30 PM

Dosimeter Training presented by Rebecca Palmer
Emergency Preparedness Coordinator, Duane Arnold Energy Center
Kenwood Park United Methodist Church
175 34th St. NE

*POLICY STATEMENT: Renew your ads, or they get dropped at the end of the month.
Any Ham can submit ads. You don't have to be a member. TNX.*

IN THIS ISSUE:

Meeting minutes - Board minutes - ARES minutes -
Want & For Sale Ads - A Certain amount of opinion – news for Hams

CONTRIBUTORS WELCOME

Have an idea you want to share? A better way of doing things? Comments on Summerfest? Then let us at BANDSPREAD know. Contact any board member listed in the directory on page 2.

Send items via e-mail to any board member at cvarcbrd@rf.org

Deadline for June 2008 issue is May29, 2008

BANDSPREAD

The Voice of the Cedar Valley Amateur Radio Club

Bandspread Staff

Publisher	Cedar Valley ARC	e-mail or Business (PHONE)	HOME
Editor & Word Processor	Mike Miller/Laura Runkle	kcønxo@arrl.net	377-5929
Circulation Manager	Al Groff, KØVM	køvm@arrl.net	393-8134
Mailing	Dave Hallock, WØSS		377-3876
<u>Club Officers</u>			
President	Steve Jones, WA6GFD	wa6gfd@aol.com	377-2219
Vice-President	Rick Olney, NØXZL	rolney@qwest.net	396-8979
Treasurer	Dennis Sutherland, KCØPON	dennis.sutherland@mchsi.com	
Secretary	Michael Zomlefer, WØMRZ	michael_zomlefer@hotmail.com	362-0092
Information Director	VACANT		
Membership/Promotion Director	Steve Sawyers, NAØIA	295-5983	377-2877
Program Director	Jason Hsu, AAØII	ham@jasonhsu.com	
Emergency Preparedness Dir.	Ron Breitwisch, KCØOX	kcøox@arrl.net	373-0095
Communications Activities Dir.	Eric Watson KØECW	k0ecw.ericwatson@gmail.com	361-7951

Club Appointments

Station Trustee	Al Groff, KØVM	køvm@arrl.net	393-8134
VE Manager	Darrel Peterson, WAØKHH	waøkhh@juno.com	393-8667
Club Historian	Dave Foster, NØCYH		377-8568
Packet Committee	Ron Breitwisch, KCØOX	kcøox@arrl.net	373-0095
Training/Education Committee			
Hamfest Chairman	Rick Olney, NØXZL	rolney@qwest.net	396-8979

ARRL Appointments

Linn County Emer.Coordinator	Scott Haney, NØGUD		366-1465
Ia Section Tech Coordinator	Robert Mason, WØDIA	Bloomfield, IA	
ARRL Midwest Div. Vice Dir.	Cliff Ahrens, KØCA	køca@arrl.org	
Official Observer			
ARRL Midwest Division Dir	Bruce Frahm, KØBJ	købj@arrl.org	
ARRL Iowa Section Manager	James Lasley, NØJL	nøjl@arrl.org	
ARRL Volunteer Consulting Eng	Steve Sawyers, NAØIA	295-5983	377-2877

Net Directory

3.896 MHz	3900 Club	8:45 a.m. Sundays
146.745 MHz (alt. 145.15Ø-192.8PL)	Linn County ARES Net	7:00 p.m. Sundays
146.85Ø MHz (-6ØØ KHz)	Johnson County Sunday Net	7:30 p.m. Sundays
145.39Ø MHz (-6ØØ KHz)	Jones County ARES Net	8:00 p.m. Sundays
145.23Ø MHz (-6ØØ KHz)	Benton County ARES Net	6:30 p.m. Mondays
356Ø KHz	TLCN (CW Section)	6:30 & 10:00 p.m. Daily
397Ø KHz	Iowa 75 Meter Net (SSB)	12:30 & 6:00 p.m. Mon—Sat

WWW Addresses

CVARC Web Page <http://cvarc.rf.org/>

ARES Web Page: <http://ares.rf.org>

Want ads and articles are accepted from all amateurs, members or not, at no charge! Submissions must be sent to

**CVARC
PO Box 2352
Cedar Rapids, IA 52406
Or to kcønxo@arrl.net**

Meeting place is indicated on the cover with program information.
For Club membership send, Name, Call, Address, Phone number, ARRL Status (Yearly, Life, or not a member), willing or not to be on call for Storm Watch and emergency situations and dues to CVARC PO Box
Yearly Dues, PAYABLE JAN 1: \$10 Regular or Family, \$5 under 18yrs of age,
After July 1: \$5 for all

MAY CVARC MEETING PREVIEW

The May CVARC meeting will be held at the Kenwood Park United Methodist Church, 175 34th St. NE, Cedar Rapids, at 7:30 p.m on Thursday, May 8th.

The program, presented by Rebecca Palmer, Emergency Preparedness Coordinator at Duane Arnold Energy Center, will be an interactive program. Ms. Palmer will be providing dosimeter training. Many members of CVARC have participated in preparedness drills in conjunction with Duane Arnold Energy Center. This training will enable us to step up the level of communication service that we provide.

Come to the meeting and learn some fascinating procedures.

RECEIVE NOTICE OF BANDSPREAD BY E-MAIL

Bandspread is now available in PDF format on the CVARC Website, at <http://cvarc.rf.org/Bandspread/>. Back issues for 2007 are in the 2007 subdirectory, and 2008 issues are in the 2008 subdirectory.

If you would like to get an e-mail notice of when the latest Bandspread is on the Website, please email Laura, KC0NXO at kc0nxo@arrl.net.

If you like the convenience and economy of the electronic version, and want to be removed from the mailing list for the paper version, please contact Al, K0VM, at k0vm@arrl.net.

APRIL 2008 CVARC BOARD MINUTES

The April 2008 Cedar Valley Amateur Radio Club Board of Director's meeting was held 10 April 2008 at the Kenwood United Methodist Church. The meeting was called to order at 6:45 PM by President WA6GFD. Others in attendance were: K0AL, N0XZL, NA0IA, K0ECW, AA0II, KC0PON, WA0KHH and W0MRZ.

A motion made by N0XAL and seconded by K0ECW approving the March 2008 Board Meeting minutes as published in the April Bandspread was carried by voice vote.

N0XZL assumed leadership of the meeting, since President WA6FGD had to attend to emergency duties associated with ongoing tornado warnings.

N0XZL read a report from KC0OX requesting that funds be set aside to reimburse club members who take the EC001 course, on a first come, first served basis. It was suggested that a maximum of five (5) club members be reimbursed the entire \$45.00

each for the cost of the course, assuming members also had ARRL membership. Non-ARRL members would be required to pay a \$75.00 fee for course attendance, of which \$45.00 would be reimbursed from club funds. A motion to fund five applicants for EC001 instruction was carried unanimously by the Board, to be forwarded to the general membership for approval.

KC0OX also wanted to insure that KC0NXN/KC0NXO would be reimbursed for any out-of-pocket costs they may have absorbed in reproduction costs associated with publishing the Bandspread. The Board unanimously agreed these costs would be reimbursed, subject to review and approval of the Club Treasurer.

NA0IA indicated that the Club would need to procure its own computer projector, owing to the future inability to continue borrowing this AV resource on an ad hoc basis. A motion was made and carried unanimously for the Club to secure a projector/case, not to exceed \$750. NA0IA also indicated that an antenna had been purchased by Mercy Hospital for its site installation. In addition, NA0IA discussed the upcoming testing schedule for May 10 at 0900 in the Rockwell Collins Main Plant Cafeteria.

KC0PON reported the balance in the checking account at \$3,578.20. He also indicated that the Minutes for the March Club meeting needed to be amended to reflect the correct value of \$3,676.21 at that time.

Vice President N0XZL circulated the Summerfest 2008 flier which will receive widespread distribution.

K0ECW indicated that he had been in communication with the Park Manager at Pleasant Creek Park regarding Field Day. The Park Manager was supportive of this effort and indicated that the Club would need to provide 'proof-of-insurance' for the event, in addition to completing appropriate event application materials. The Club Treasurer agreed to provide the required insurance documents for this event and make them available to K0ECW. K0ECW also highlighted the following upcoming events:

- 17 May, Saturday, Marion Arts Festival 5k Run/Walk
- 1 June, Sunday, Pigman Sprint Triathlon, Pleasant Creek Recreation Area, Palo
- 28 June, Saturday, Dragon Boat Races, Pleasant Creek Recreation Area, Palo
- 28-29 June, Saturday through Sunday, ARRL

- Field Day, Location to be determined
- 12 July, Saturday, Linn County Fair Parade, Central City
- 17 August, Sunday, Pigman Long course Triathlon, Pleasant Creek Recreation Area, Palo
- 23-24 August, Saturday through Sunday, Multiple Sclerosis Cycle For The Cure bike ride, some bicyclists starting from Cedar Rapids/Marion will stay overnight in Marshalltown before returning the next day.
- 20 September, Saturday, Alzheimer's Walk at Noelridge Park, Cedar Rapids
- 25 October, Saturday, Muddy Monster Cross Country Run (formerly the Devil's Dash) at Seminole Valley Park ***Please note the date change***

WA0KHH highlighted the upcoming examinations to be held on May 10th at 0900 at the Rockwell Collins Main Cafeteria. He also discussed the upcoming VE session on April 24th in Vinton. WA0KHH also stressed that the new Extra Exam class pool will be in effect on July 1 of this year.

Meeting adjourned at 7:18 PM

Submitted by W0MRZ, Secretary

APRIL 2008 CVARC MEETING MINUTES

The April 2008 general membership meeting was held Thursday, 10 April 2008 in the Kenwood United Methodist Church. The meeting was called to order at 7:42 PM by Vice President N0XZL. All attendees and guests introduced themselves with 19 members and guests present.

Because a membership quorum was *not* present, no formal motions could be made or passed at this meeting. Several reports and some topical general discussions were held, however.

Communication Activity Director K0ECW discussed his meeting with the Pleasant Creek State Park Director and that the Park Director was supportive of the CLUB's intent to host Field Day there. K0ECW will be filing germane paperwork with the State Park, with Field Day details to appear in the upcoming Bandspread. K0ECW also indicated he will be reviewing the ARRL website for Field Day abanners and other promotional material. Also discussed by K0ECW were:

- 17 May, Saturday, Marion Arts Festival 5k Run/Walk
- 1 June, Sunday, Pigman Sprint Triathlon, Pleasant Creek Recreation Area, Palo

- 28 June, Saturday, Dragon Boat Races, Pleasant Creek Recreation Area, Palo
- 28-29 June, Saturday through Sunday, ARRL Field Day, Location to be determined
- 12 July, Saturday, Linn County Fair Parade, Central City
- 17 August, Sunday, Pigman Long course Triathlon, Pleasant Creek Recreation Area, Palo
- 23-24 August, Saturday through Sunday, Multiple Sclerosis Cycle For The Cure bike ride, some bicyclists starting from Cedar Rapids/Marion will stay overnight in Marshalltown before returning the next day.
- 20 September, Saturday, Alzheimer's Walk at Noelridge Park, Cedar Rapids
- 25 October, Saturday, Muddy Monster Cross Country Run (formerly the Devil's Dash) at Seminole Valley Park ****Please note the date change***

KC0PON reported a current checking account balance of \$3,578.20. The Club Treasurer also stated that the Bandspread Mailing List was being updated to reflect current active membership.

NA0IA indicated that the current ham class had 6 students participating and that VE exams would be held on 10 May at 0900 in the Rockwell Collins Main Plant Cafeteria.

The Vice President read a report by KC0OX that requested up to 5 people be reimbursed for the ARRL EC001 class. KC0OX also indicated that Mercy Hospital had bought the required antenna for repeater hook-up there and that the CLUB had coax cable to complete antenna installation.

WA0KHH highlighted the upcoming examinations to be held on May 10th at 0900 at the Rockwell Collins Main Cafeteria. He also discussed the upcoming VE session on April 24th in Vinton. WA0KHH also stressed that the new Extra Exam class pool will be in effect on July 1 of this year.

NA0IA indicated that the Club would need to procure its own computer projector, owing to the future inability to continue borrowing this AV resource on an ad hoc basis. Earlier in the evening, the Board had approved a motion to allocate up to \$750 for a projector and case. A general Club discussion ensued and it was suggested that the Club consider a warranty option for this unit.

The informal business section of the meeting was concluded at 8:00 PM. After the social break, multiple

door prizes drawings were held with the following prizes and recipients:

ARRL Antenna Handbook—N0VNV

Amateur Radio Theme Hats—NN0XZL, K0OAS, WB0OAV, W0WLL

The program for the night was a slide presentation QRO - QRM the Story of an International Shortwave Site, N0MMA - N0MMA/DU1 presented by Guy J. West.

Meeting concluded at 9:37 PM.

Submitted by Michael, W0MRZ, Secretary

ARES PLANNING COMMITTEE MEETING MINUTES – APRIL 2008

Minutes for 3 April 2008 ARES planning committee
Attending: N0GUD, KC0OX, KD0HF, WA6GFD, Charles and Martin Litfin, KD0CGN, K0ECW, KF0VF

- Flood watch measuring devices Eagle project (Charles)
 - Presentation by Charles Litfin, Eagle Scout candidate. Copies of presentation were handed out to those present.
 - Question and answer period followed. Suggestions were made as to how to improve the overall plan (which was quite good).
- Mercy antenna project update (WA6GFD)
 - Things are moving along. The cable is ordered, the polyphaser is ordered, and we have a source for connectors.
 - We do not have a delivery date for the cable.
 - Mercy is asking for a date so they can get started. They are eager to begin.
 - Antennas should arrive by Monday (7 April).
 - Next step is the side-mount brackets for the tower. Once that is resolved, we'll be ready to go.
 - Mercy's crew has made progress on their part of the installation. They will run the cable for us. They may ask for a few volunteers to help with this.
 - We have not yet approached CVARC on funding as we expected to have at least one more meeting before needing to. Funding is not an immediate concern.
 - Schedule: we'd prefer to work during evenings or on weekends, but this may not

work well for Mercy. This will be discussed with them.

- Mercy has not indicated if they plan to buy a radio for that location, or if we are expected to bring our own. Either way works, but we need to be prepared.
- Perhaps we can approach St. Luke's and try to get some of the excess cable we have there. We can lobby to replace the current cable with the same we propose for Mercy, as it is less lossy. These are LONG cable runs, so every dB we can get counts. Discussion of cable-running techniques followed, as there was some concern about the actual logistics involved.
- We hope for 20 April for installation, but this is not guaranteed due to delivery date uncertainty. It won't take long once the materials have arrived.
- 160m net experiment (WA6GFD)
 - Experiment is ongoing.
 - We've been averaging close to 20 check-ins lately.
 - It's generally good, but there are always a few stations that cannot be heard by everybody.
 - There is great variety in the types of antennas used, including one station that uses the rain gutters on his condominium.
 - We usually meet on 1973 kHz to avoid QRM.
 - Change to net: we will be meeting at 2130 instead of 2100 henceforth. This is to avoid overlap with some of the local VHF nets. This should improve participation, and as we get more daylight, we'll still be on the back side of the night/day transition.
 - Advocates of 160m are recommending vertical antennas. Even a short vertical will work better than a horizontal for ground wave. This is not NVIS, but we're conducting the net to see if ground wave will work. Some discussion of this, pro and con, followed.
 - The antenna question will be researched.
 - We'll put out a call by e-mail to have stations that could hear, but not be heard, send data in so we know how far the various stations could reach.
- Spotter Training results (KC0OX)
 - These have been circulated in the Bandspread and other publications. 203

- registered, 77 hams, the rest general public and public service.
- WA6GFD is now the Assistant District Emergency Coordinator for District 6 West.
- National Response Plan
 - FEMA has released this now.
 - Several organizations are no longer accepting IS800. It is now IS800A. Make sure you take the correct class. 'A' seems the more appropriate for ARES.
- Past Activities
 - Stormwatch 31 March
 - Seemed to go well. We could not confirm a citizen report of a tornado in NE Linn.
 - We did not run the radar for this event.
 - There was very little advance warning. Things moved quickly.
 - Other than the citizen report, things were uneventful.
 - After-storm damage assessments indicated nothing unusual.
 - There was some interference between our radios and the CAP units. We will have to work this issue.
 - Some discussion of the use of two frequencies followed.
- Other items (late additions)
 - KF0VF reports that there were only three stations that responded during the storm event. They are working to improve this.
 - KF0VF reports that WB0ENL is very ill.
 - K0ECW reminds us that the MS Walk is 19 April. Still needs volunteers (would like 8-10 total).
 - K0ECW says the next event will be 17 May. Details to follow.
 - K0ECW has been contacted about the Devil's Dash (now called the Monster Mash). This will be in October.
 - K0ECW reports that the Pigman this year will be 1 June. Discussion of various other events followed.
 - WA6GFD suggested that we might try setting up a classroom version of IS100/200/800, similar to what we do with spotter training. We will talk to EMA about the possibility.
 - WA6GFD gave the dates for DAEC and other events
 - 1 May will be a RAGBRAI exercise in North Liberty.

- DAEC drills are 21 May, 17-18 September, then 21-22 October. (Hams might be involved on the first days of the two-day events.)

Submitted by Scott, N0GUD.

FROM THE PRESIDENT'S DESK

Spring has arrived at last, and with its arrival, it has brought the first of the seasonal thunderstorms. About two weeks ago, we had our first big storm of the season and I wanted to thank all of those who monitored or participated in the Severe Weather Net. I would like to encourage as many of the club members as possible to listen to these Severe Weather Nets, and report when you have information that meets the reporting criteria. It is very helpful to have as many sets of eyes, from as many angles as possible, to observe the cloud formations and report any dangerous activity. By having more than one observer looking at a formation, we can quickly verify or confirm any suspicious activity that might be present. You can be an effective spotter, even if observing from your porch or yard. If you are one of the folks who like to go out to a good vantage point, please keep your safety in mind. Storms with damaging winds and other conditions can form quickly. Please choose a spot that affords as much protection as possible and have more than one direction of travel that you can take in case severe weather dictates a rapid relocation.

Along with the T-storms, Spring also signals the start of our Communications Support Activities. These activities can be the 5K walks/runs, the PIGMAN events, Field Day or the various Emergency Management Agency Exercises that will occur during the Summer. If you have the time, please come out and participate. Many of these events are fun to work and also provide an excellent opportunity to hone our communications skills and test our latest portable station set ups.

Look forward to seeing you all at the Meeting on the 8th of May. I am hoping Mother Nature will cooperate that night and will not have to leave again before the meeting starts. Thanks to Rick, N0XZL for stepping in to run the meeting.

73, WA6GFD, Steve

FROM ERIC WATSON, COMMUNICATIONS ACTIVITIES DIRECTOR

The Multiple Sclerosis Walk was Saturday 19 April at Washington High School. We had a nice, uneventful time. I would like to thank the following

stations for their help: K0ECW, WA6GFD, KF0VF, N0KVV, KC0RZQ and his son Alex, KD0BIG, N0THE, KC0VDR and AC0HC.

Special thanks to KD0BIG for being assistant net control. In the past I've only had one person as net control. I've learned from experience that two hams are really needed. I'll be asking for volunteers to be assistant net control operators for each event this year. The position will be filled on a first come, first served basis. This will be a good way to train interested hams in net control functions.

There has been some discussion in the past about the regularly used club frequencies and how it would be a good idea for local hams to have these frequencies pre-programmed into their radios. These same frequencies are used for Skywarn nets, CVARC public service events, Witch Watch and when there is a repeater failure.

Here are the frequencies to remember:

Primary Repeater	W0GQ	146.745	-600Hz offset	no tone
Secondary Repeater	W0HUP	145.150	-600Hz offset	192.8Hz tone
Primary Simplex		146.505		
Secondary Simplex		146.460		
Nationwide 2M calling freq		146.520		

Volunteers are needed for the Marion Arts Festival 5k Run and Fun Walk on Saturday 17 May. The race starts and finishes in Marion Square Park in Marion. We will meet at the caboose in the park at 0730. The race starts at 0800 and should finish around 1000. The assistant net control position is still open. Talk-in will be on the 146.745 repeater. HTs and simplex frequencies will be primarily used for this event.

Volunteers are needed for the Pigman Sprint Triathlon on Sunday 1 June at Pleasant Creek State Park north of Palo. We will meet at 0700 at the gazebo/information booth in the first parking lot after the park entrance. The first swimmer hits the water at 0730 and the race should finish around 1200. A specific volunteer is needed for the safety boat. The assistant net control position is still open. The safety boat ham and the assistant NCS will need to meet at the gazebo no later than 0645. This is to have enough

set up time and to get the safety boat ham to the water well before the race starts. Talk-in will be on the 146.745 repeater. HTs, mobiles and simplex frequencies will be used for this event.

All hams, regardless of experience, club affiliation or lack of equipment are invited to participate in public service events. Come practice your radio skills in a low-key environment.

If you have questions about any event or would like to volunteer, please contact me by email at k0ecw.ericwatson@gmail.com or by phone at 319-361-7951.

As of this writing the Events Calendar for 2008 is:

- 17 May, Saturday, Marion Arts Festival 5k Run/Walk
- 1 June, Sunday, Pigman Sprint Triathlon, Pleasant Creek Recreation Area, Palo
- 28 June, Saturday, Dragon Boat Races, Pleasant Creek Recreation Area, Palo
- 28-29 June, Saturday through Sunday, ARRL Field Day, Location to be determined
- 12 July, Saturday, Linn County Fair Parade, Central City
- 17 August, Sunday, Pigman Long course Triathlon, Pleasant Creek Recreation Area, Palo
- 23-24 August, Saturday through Sunday, Multiple Sclerosis Cycle For The Cure bike ride, some bicyclists starting from Cedar Rapids/Marion will stay overnight in Marshalltown before returning the next day.
- 20 September, Saturday, Alzheimer's Walk at Noelridge Park, Cedar Rapids
- 25 October, Saturday, Muddy Monster Cross Country Run (formerly the Devil's Dash) at Seminole Valley Park ***Please note the date change***

Please check out the web calendar for the latest information about an event:
<http://my.calendars.net/iowad6w>

VE TEST SESSION MAY 10, 2008

The Cedar Valley Amateur Radio Club will sponsor an amateur radio license testing session to be held on Saturday, May 10, 2008 at Rockwell Collins Main Plant, 835 35th St. NE, Cedar Rapids, IA. Please use the cafeteria "tunnel" entrance. Registration will open at 8:30 AM, with testing to begin at 9:00 AM. All test elements will be offered, and walk-in applicants are welcome.

For additional information please contact Darrel Peterson at 319-393-8667 or email to wa0khh@arrl.net.

K-12 CORNER

This past Friday, 25 April, a ham radio demonstration was one of the stops for visitors on Take Your Child To Work Day at Rockwell Collins in Cedar Rapids. The Collins Amateur Radio Club has two stations in Cedar Rapids, one at the C Avenue complex and one at Main Plant. Several employees and retirees were at the C Avenue station, on the air as W0CXX, when groups of 10-15 children came by. They were able to see some genuine Collins ham equipment, as well as more modern rigs.

One of the contacts that morning was with a station in Hawaii. Thanks to KC0ODK, NY0V, K0DAS, KC0CD and W0MHZ.



Contact made! Photo Courtesy K0DAS

The IEEE Cedar Rapids section publishes a newsletter, "Corona." In the May 2008 issue they note that the Student Branch Counselors for University of Iowa and University of Northern Iowa are considering several activities to help revitalize those IEEE student chapters. One of the activities mentioned was amateur radio. We're looking forward to hearing more about these efforts.

As always, if you have tips, success stories or questions about working with K-12 students, we'd like to hear about them. If you have upgraded your license or received a radio award, such as WorkedAll States, we'd like to share that good news. Please contact us at kc0nxn@arrl.net

KC0NXN & KC0NXO

QUESTIONS ABOUT NEWSLETTER?

Please let us know if there are any errors or omissions that we can correct. If there's something you'd like to see, please also let us know. Is there something that you think you can contribute?

KC0NXN & KC0NXO

CLASSIFIED ADVERTISING

FOR SALE - Due to Arthritis in my hands I can no longer build any electronic projects. Therefore I would like to sell my setup in total (one of the best "junk boxes") to one person. All 73 value resistors in 1/2 watt 10% range. About 10 - 25 of each value.; Selection of ceramic, tantalum, electrolytic and mica capacitors; Several hundred ICs - lots of OP Amps, voltage regulators and CD4000 series CMOS logic ICs; Lots of transistors including power units. Large quantity of potentiometers; Good junk boxes with rotary inductor, RF and audio filters, crystals, several Collins mechanical filters, connectors. Lots of hardware - good selection of screws and nuts.; Test equipment including Goldstar dual channel oscilloscope, HP 3311 Function generator, data Precision Model 5740 counter, Lambda Power Supply 0 - 40 volt 1 amp switch selectable, HP 6234 dual power supply 0 - 30 volts 200 ma, various home made power supplies, Heathkit RF Generator, Heathkit Audio Oscillator, HP RF attenuator. Also two 4 analog, 6 digital input data collection unit with computer disk.; Also a good work bench with shelves, 8 drawers and a 10A Variac. Lots of other stuff. Asking price - \$530. Bob Joy, W0EAN 447-5860

ESTATE SALE: Hy-Gain 18AVQ Vertical - \$10.00; Homebrew 2 meter yagi antenna - \$10.00; Kenwood TS-820S HF transceiver w/mike - \$250.00; Icom IC-24AT Hand held w/charger - \$50; Radio Shack HTX-212 2 meter mobile - \$75.00; KDK FM-2033 2 meter mobile - \$35.00; 4ea CB Mobile transceivers - \$25.00 each; Assorted Hand Tools - \$25.00; Parts Bins with misc items \$25.00

If interested, contact Steve Jones, WA6GFD@aol.com, or at 319-377-2219.

YOUR AD HERE

The rates are right (free for any amateur), and the audience is perfect for your for sale or wanted advertisement. Send to:

CVARC

PO BOX 2352

Cedar Rapids, IA 52406

Or to kc0nxo@arrl.net

All advertisements must be renewed monthly!

About CVARC:

The Cedar Valley Amateur Radio Club is a regional group promoting amateur radio activities in the Cedar Rapids, Iowa area. CVARC is a non-profit corporation registered in the state of Iowa. CVARC meets on the second Thursday of each month in the Kenwood Park Methodist Church at 7:30 PM, Central Time. The meeting consists of club business and a program. The programs tend to be Amateur oriented but we occasionally host a general interest topic. Watch the website at cvarc.rf.org or the Bandspread newsletter for the topic.

All are welcome at these meetings, neither membership nor amateur radio license is required.

CVARC affiliations:

- Amateur Radio Relay League (ARRL)
- Linn County Amateur Radio Emergency Service (ARES)
- Linn County Emergency Management Agency

CVARC Activities:

- Sponsor and present the premier Hamfest of eastern Iowa, in August
- Participation in the Annual ARRL Field Day Event
- Publish a monthly newsletter known as the Bandspread
- Participate in a number of Public Service Activities in the Cedar Rapids area
- Support and Participate in the Storm Watch Net operated by the Linn county ARES organization
- Hold social functions during the year, including the annual Holiday Party and Picnic
- Sponsor a complete ham station at Linn County Emergency Management HQ.
- Conduct classes for Technician and higher licenses each year
- Sponsor VE testing three times a year
- Maintain the 146.745 MHz repeater in Cedar Rapids

Cedar Valley Amateur Radio Club

PO BOX 2352

Cedar Rapids, Ia 52406-2352

Call and License Class _____ Name _____ Date _____

Spouse Call and License Class _____ Spouse Name _____

Family Members' Call, Name, and License Class _____

Address _____

City _____ State _____ Zip _____ -- _____

Phone (H) _____ (W) _____ (Cell) _____

EMAIL ADDRESS _____ Please Print

Would you like to be added to the CVARC E-mail reflector? Yes () No ()

ARRL Member? Yes () No () VE Check if yes ARRL VE () W5YI VE ()

Are you interested in participating in Public Service Events? () Yes () No

Help with ham fest? Many job types available. () Yes () No

Dues Regular or Family: _____ \$10/year; Under 18 years of age: _____ \$5/year; Half year after July 1: _____ \$5

===== Club Use Only – Do NOT Write Below This Line =====

Recd: _____ Treas: _____ Entered: _____ Card: _____

Bandspread: _____