



STATIC SHEET



2011 Holiday Meetings

The November meeting is the DMRAA Chili Feed and Auction on Tuesday, November 22 at the St. Paul Presbyterian Church, located at 6426 Merle Hay Road in Johnston. Dinner starts at 6:00pm and the auction begins at 7:00pm. The cost is \$5.00 per person for admission. The general public/non-members are welcome, so feel free to bring a friend and some extra equipment you have laying around waiting to be sold!

In previous years, we've had a very good selection of used equipment including radios for HF, VHF/UHF, antennas and accessories, kits, books, scanners, computers, and other electronics.

Just two weeks after the Chili Feed, we will be back at Plymouth Congregational Church at 42nd and Ingersoll for the annual DMRAA

Christmas Party on Tuesday, December 6 in the Waveland Hall.

Dinner will begin at 7 p.m. in the Waveland Hall. It is a potluck-style dinner, so please bring a main dish and a side dish to share. The adjacent kitchen is available for those needing an oven and/or refrigerator. The club will provide a smoked ham; coffee, tea, and hot cider will also be furnished. For those not familiar with Plymouth, there is a parking garage on the east side of the church in case of bad weather. Signage in the church will direct you to Waveland Hall, which is on the 2nd floor. Come and enjoy the food and fellowship!

The Winthrop M. Mager Award will also be presented at the meeting. The purpose of the Winthrop M. Mager Award is to perpetuate the memory of the Rev. Winthrop M. Mager WØMJH, and to stimulate the activity in all fields

of Amateur Radio in the Central Iowa Area.

Please join us for good food, friends, and entertainment at both of these holiday events with the DMRAA!

Kevin Sanders - KØKDS



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Officers and Board

Kevin Sanders	KØKDS	President
George Noble	KK7FM	Vice-President
Kirk Nelson	WL7CLI	Secretary
Bill Claypool	NUØQ	Treasurer
Bruce Brumm	KCØZMT	
Ron Hobbs	NØXWI	
Chuck Hoveland	WØIBG	
Dennis O'Brien	KAØDOS	
Ben Sinclair	KCØZMX	

President's Soapbox

Kevin Sanders - KØKDS

What a year!

Coming off of two very well-received general meetings in September and October, it's time for the annual DMRAA Chili Feed & Auction followed by the annual Christmas Party.



While we give thanks and look back on 2011 at these events, DMRAA members have plenty to be excited about next year. We've had a heck of a year, and there's no sign that we're going to be slowing down any time soon.

Our membership base is continually growing. We're retaining our current members and attracting new members through VE testing, technician classes, social media, and public events like the DMRAA Hamfest and W0AK Field Day. With a growing membership, we're able to bring in different perspectives and skills, which makes us a very well-rounded club.

Speaking of those events, the Field Day 2011 results are in and W0AK placed first in all classes for the Iowa section, and placed in the top ten in all classes for the Midwest division, proving to be the most successful W0AK Field Days in recent history despite a rough start in Saturday's morning rain.

We had a heck of a hamfest, too. We attracted vendors and attendees from all over the midwest and it looks like it was a good move for us to move the event to a larger facility to allow for growth. Next year's hamfest will provide another opportunity to grow the hamfest even further.

As soon as the handbell choir lays their bells down for the night and after all of the potluck food has been consumed at the Christmas Party, the DMRAA board and its respective committees will shift into high gear and start planning for next year's events -- to an extent, the planning has already been underway.

Already, we already have our slate of programming ready for the first quarter of 2012. We'll kick the year off with a presentation on PIC microcontrollers in January, followed by the annual MISA spotter talk in February, and then a presentation on high-altitude ballooning in March.

I am very thankful for everyone that makes all of this happen, from the DMRAA board, club members, visitors to our events, and those that donated their time and energy towards our events.

If you are someone that has an idea for a meeting, wants to help plan an event, or just has general suggestions, please do not hesitate to contact a board member in-person or via our website, because we would love to hear from you. We also have subcommittees that coordinate all sorts of different aspects of our club that members can join.

I am really looking forward to find out what next year brings us. It's a great time to be a DMRAA member!



Skywarn Recognition Day

Kevin Sanders - KØKDS

The 13th Annual Skywarn Recognition Day (SRD) will be held at National Weather Service offices around the nation to celebrate the contributions amateur radio operators make during severe weather. The Des Moines National Weather Service (NWS) office, located at 9607 NW Beaver Drive in Johnston, will be open on Friday, December 2nd from 6 p.m. until midnight and again Saturday, December 3rd from 8 a.m. to 6 p.m. for storm spotters, amateur radio operators, and members of the interested public to visit the office, learn about the mission of the Mid-Iowa Skywarn Association (MISA) and to make radio contacts on HF and VHF/UHF. This is a way of saying “thank you” to storm spotters from the staff of the Des Moines NWS office.

While it’s not a formal contest, stations should try to contact as many other NWS offices and other non-NWS stations as possible. The Des Moines NWS office, using the station call sign K0DMX, will be operating on the 80, 40, 20, 15, and 10 meter bands as well as on the linked MISA repeater system on VHF and UHF, including D-STAR. Around 100 NWS stations are expected to participate this year.

Even if you’re not able to make it to the Des Moines NWS office to participate in the event, all amateur radio operators within the range of a repeater on the MISA linked system is encouraged to make a contact on the linked system. If you can make a contact on both a VHF repeater and UHF repeater, please do! That would count as two contacts since it was made on two different bands.

Skywarn Recognition Day was created in 1999 by the National Weather Service and the American Radio Relay League (ARRL) to recognize the importance that amateur radio provides during severe weather. Many NWS offices acquire real-time weather information from amateur radio operators in the field. These operators, for example, may report the position of a tornado, the height of flood waters, or damaging wind speeds during hurricanes. All of this information is critical to the mission of the NWS which is to preserve life and property. The special event celebrates this special contribution by amateur radio operators.

The 2011 Skywarn Recognition Day in Des Moines is

organized jointly by the Des Moines National Weather Service staff and the Mid-Iowa Skywarn Association. Contact information, as well as details and updates will be available on the Mid-Iowa Skywarn Association website at <http://www.midiowaskywarn.com>.



New “Night Owls Net!”

Ian Walmsley (KDØPPI) is calling the Night Owls Net on Wednesdays at 11pm on the 146.610 repeater.

If you stay up late, check in and say hello!

Polk County ARES

Scott Kirstein - NØOOD



As you are reading this, Polk County ARES has completed another year of providing communications services to community organizations, both demonstrating and refining our capabilities; as well as providing “real time”

learning opportunities for both individuals as well as the organization. Again, I would like to thank those of you who have given your time over the last year to help out with these events. I would also like to thank your families for allowing you the time to volunteer.

As we prepare to “stand down” from our public service event schedule and spend more time with our families over the holidays, I would encourage all of you to take at your mental list of projects that are going to “wait until I have

more time,” pick out one or two and make a plan to get them completed. In my world that would mean to actually take the time, and organize my gear so when we have an event, or we are actually asked to provide emergency communications for something, I don’t have to scurry around for two or three hours to round up the gain antenna, headset, extra handheld, antenna support – or antenna for that matter.

Hopefully your “when I have more time” project is more fun than mine. Seriously, thanks again for your efforts in 2011, and I’m looking forward to working with you all again in 2012.

Scott Kirstein

NØOOD

Polk County ARES EC

515 490-7414 (cell)

n0ood@arrl.net

Don’t forget!

The Living History Farms Cross Country Race is November 19th. Contact Scott Kirstein if you’d like to volunteer!



The 2011 Winthrop Mager Award

Kevin Sanders - KØKDS

The purpose of the Winthrop Mager Award is to perpetuate the memory of the Rev. Winthrop M. Mager WØMJH, and to stimulate the activity in all fields of amateur radio in the central Iowa area. It is awarded by the Des Moines Radio Amateurs' Association. Any radio operator with any class license who is a member of the Des Moines Radio Amateurs' Association is eligible. Nominations will be submitted to the committee in writing no later than the regular November meeting.

Nominations for the Winthrop Mager Award need to be sent to the DMRAA president no later than the conclusion of the November meeting, which is the annual chili feed and auction. They must be in writing. The president will give the nominations to the committee for processing at that time. Nominees are those amateur operators that have shown outstanding support for amateur radio, promotion of the amateur radio service and have done so with the utmost respect for the community and fellow operators.

Please submit your nominations soon!

PAST RECIPIENTS

1964 JOHN MOFFET WØSVD	1994 LEROY KODER WDØCZO
1965 LEE J. ROY WØVUDO	1996 BILL CLAYPOOL NUØQ
1966 R.W. DENNISTON WØDX	1997 DUANE BOWER WDØUCY
1967 ROBERT M. EVANS WØAUL	MELANIE BOWER KBØJSD
1968 KENNETH WOODY KØSWE	1998 JIM CASE KIØIP
1969 WARREN HUFFMAN KØCVT	1999 MAGGIE HARMON KBØZBL
1970 A.W. "RED" KRUSE WØLCX	2000 DAVE JOHNSON NØLVA
1971 THOMAS R. FERGUS KØQXT	2001 RON HOBBS NØXWI
1972 DALE WHITE KØQXL	2002 JOANN DEATON KCØBTV
1973 RICHARD WITT KØIDJ	2003 DON WHITMER KCØWJ
1974 WAYLAND OSBORN WØRRG	2004 MIKE GREENWOOD KC4VG
1975 HAROLD ROSENBERG WØIYW	2005 DAN MILLER KCØFRL
1976 BRYON W. MANN WØSEJ	2006 KIM ENGLAND KCØTHB
1977 WARREN BENSLEY WAØITC	2007 TOM REIS NØVPR
1978 RAY STANLEY K5RRS	2008 LOWELL ABARR KB6SDI
1979 CARMIE SMITH WAØJOC	2009 GEORGE NOBLE KK7FM
1980 GARY LILJEGREN WØSH	2010 LARRY VANDEWATER NØBKB
1981 CHARLES CORCORAN KD9UD	
1982 ROBERT MCCAFFREY KØCY	
1983 RONALD KINTON WBØMBZ	
1984 HARRIS "MIKE" GOLDENKØGHD	
1985 BOB HEITMAN WDØDOK	
MARSHA HEITMAN KAØJZF	
1986 JIM SNAPP NAØR	
1987 BOB JIMMERSON KAØOMM	
1988 JOHN SAWHILL WAØO	
1989 AL PETERSON KCØKZ	
1990 DON BOYVEY KDØBG	
1991 HAROLD OBER NØHZK	
1992 DON SCHMIDT WØANZ	
1993 LARUE "IRISH" OLSON WAØATI	

Area Nets

Ames

Sunday	147.240+	7:00pm	Story County ARES Net
Wednesday	147.375+ t114.8	9:00pm	Cyclone Amateur Radio Club

Boone

Sunday	146.850-	9:00pm	Boone County ARES Net
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Des Moines

Sunday	146.610- t114.8	8:00pm	Central Iowa ARES Net
Sunday	146.940- t114.8	follows ARES	Central Iowa Technical Net
Sunday	146.610- t114.8	9:00pm	ARTS Net
Wednesday	146.610- t114.8	11:00pm	Night Owls Net NEW!
Thursday	146.940- t114.8	7:00pm	Polk County ARES Net

Marshalltown

Sunday	147.135+ t141.3	6:00pm	CIRAS Net
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Perry

Monday	146.610- t114.8	8:00pm	Dallas County ARES Net
Monday	146.610- t114.8	follows ARES	HARC Net

Webster City

Monday	147.015+	7:00pm	Hamilton County Radio Club Net
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Statewide Nets

Mon-Sat	3,970	12:30pm & 5:30pm (6:00pm summer)	Iowa 75 Meter Traffic Net
Sunday	3,970	5:30pm (6:00pm summer)	Iowa Traffic and Emergency Net
Monday	3,990.5	5:30pm (1st Monday of the month)	Iowa RACES Net

ARES Nets serve several purposes:

- Operator training
- Training of Net control operators
- Passing formal traffic

Please check in!

Figure 2 is looking at a 16 pin IC (Integrated Circuit) from the top and there is a notch or an extra dot where pin 1 and 16 are.

The pins count counter clockwise from that end. Pins 1 to 8 are visible on the side close to us. This is a 16 PIN IC showing the pin count, but not one of the 4027B's.

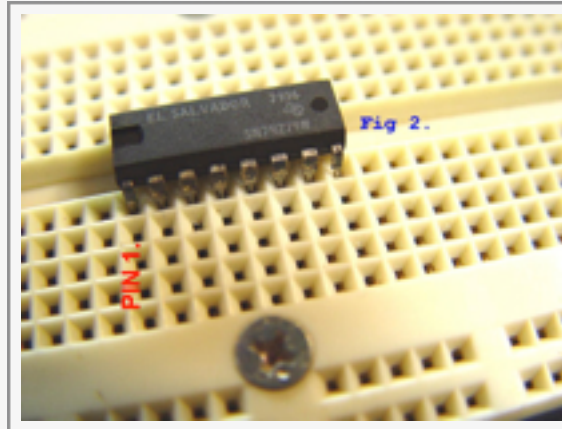
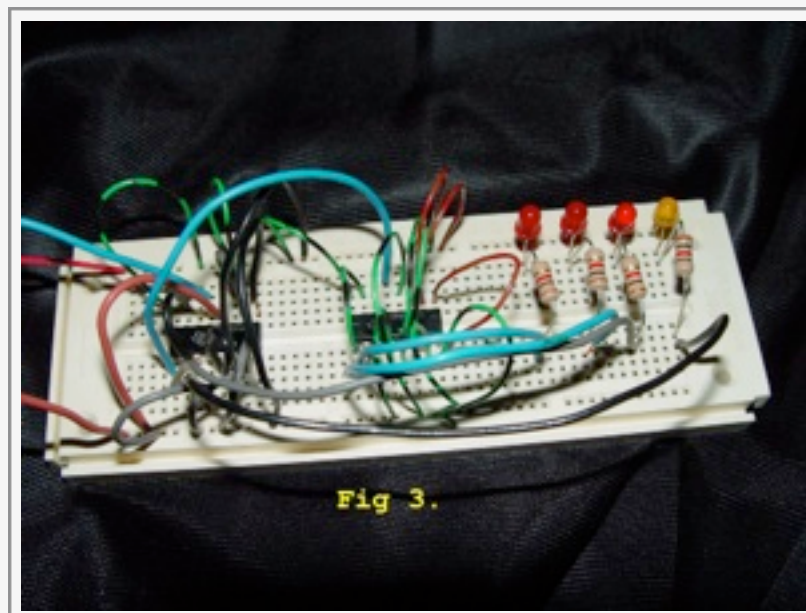


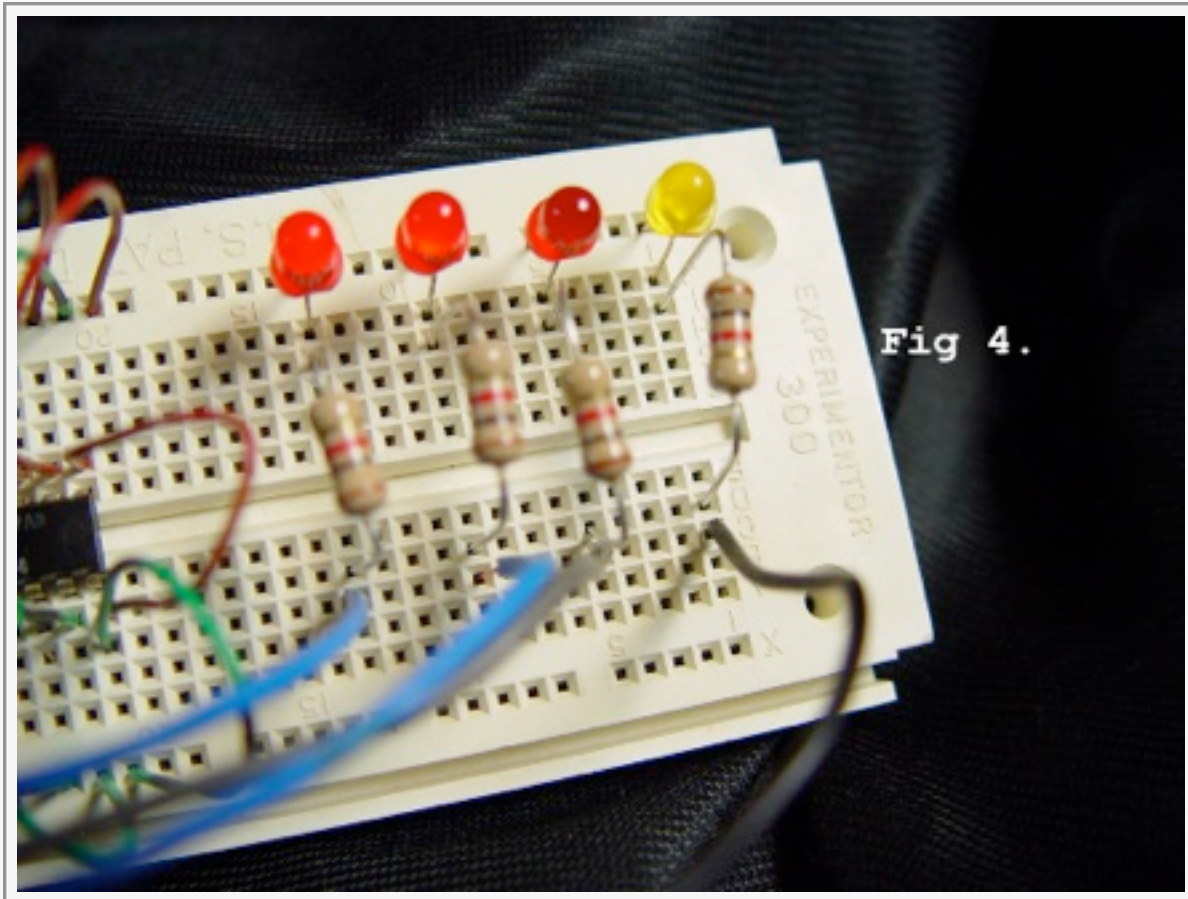
Figure 3 is the actual completed circuit with the LEDs counting from right to left with the least significant bit on the right and the most significant bit on the left. Right to left they are 1/0, 2/0, 4/0, and 8/0. The left most LED is the 8/0. This 2/0, as an example, means when light has a value of 2 and when dark is 0. You can barely make out that the count is 2 as the second from the right is on only. The top left wire is to + 12 volt source. The blue wire from pin 13 of the left hand 4027B is the clock input that requires + with respect to the – or bottom of the board. The bottom left has a brown wire that is the – or negative side of the power. The black wire below that is really a shadow. The IC's are placed like the block diagram but the LEDs are right to left so the high value is on the left.



Continued...

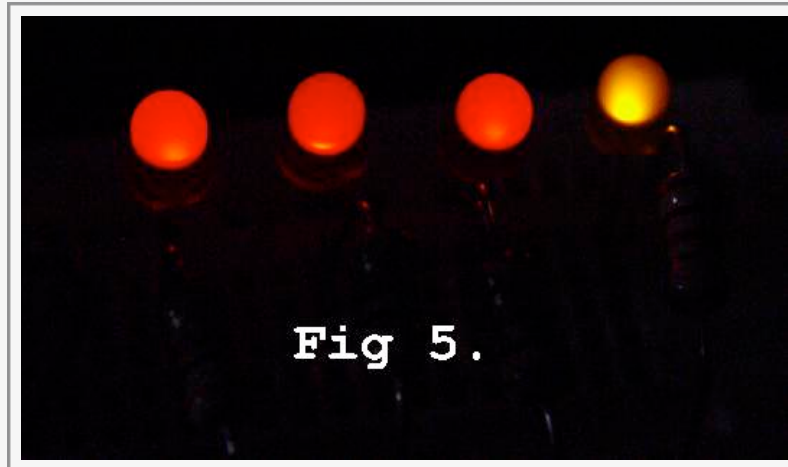
All 4 of the original circuits were replaced by two each 4027 type CMOS integrated circuits chips. That was for another time and this is the time. The operating voltage could be 6-12 volts. The last time I saw a price on the 4027 units they were about \$.50 each. I just checked DIGIKEY and they were still priced less than \$.60 each not including postage. I am sure there are other IC's that would have all 4 in one package. I just happen to have the 4027B's in my junk box now.

Figure 4 is a close up of the led's with all but the 2/0 light. The count would be $8 + 4 + 0 + 1$ or 13.



Continued...

Figure 5 is with the room lights out so you can see the LED's better. All are on so the full count is $8+4+2+1=15$ before the next clock that will extinguish all and start over with a count of 0 or zero. The count is 0 zero to 15 or 16 clock pulses or divide by 16.



SOWHY DID I BUILD THIS? I just had to see how easy it was using IC's. It took less time assembling it than it did to accumulate the parts JUNK BOX (Storage area). I used CMOS type or the 4000 series that can have up to +12 volts. I could have used 7400 IC's but the voltage would have to be very close to +5 volts. So what good is this? How can you ask such a question?? An **Electronics Nut** builds stuff just to see if it works! HA.

73 de Larry KA0FTO

Calling all Hams!

Would you like to write an article for the Static Sheet? Email KC0ZMX, ben@bensinclair.com!

2011 DMRAA Calendar

General Meetings and Events

22 November, 2011 Chili Feed / Auction

6 December, 2011 Christmas Party

24 January, 2012

28 February, 2012

27 March, 2012

21 April, 2012 Hamfest

24 April, 2012

Board Meetings

3 January, 2012

7 February, 2012

6 March, 2012

3 April, 2012

1 May, 2012

5 June, 2012

3 July, 2012

Hungry and looking to meet local hams?

Friday's at the City Buffet

on University (next to Toys R Us) a group of hams meet for lunch.

This is an informal meeting and provides an excellent opportunity to pass information while enjoying a nice selection of Chinese cuisine. The group usually arrives around 11:45 and breaks up at about 1:00. All are welcome, including family members.



Testing Sessions

11/20/2011 1:00pm

01/15/2012 1:00pm

Registration starts at 12:30 PM (no admittance after 1pm)

Johnstone Supply Classroom (2nd floor)

11000 Justin Drive

Urbandale, IA 50322

Contact: Rick Allen ACØCFL

(515) 795-2162

n0cfl@arrl.net

12/10/2011

Boone

Boone Amateur Radio Klub

Kruck P&H Warehouse Classroom

9:00 AM (Walk-ins allowed)

12/17/2011

Marshalltown

Central Iowa Radio Amateur Society

RACOM Corporation (1st floor meeting room)

10:00 AM (Walk-ins allowed)

02/11/2012

Boone

Boone Amateur Radio Klub

Kruck P&H Warehouse Classroom

9:00 AM (Walk-ins allowed)

You now have the option of paying for up to 3 years when renewing your membership in the DMRAA:

1 Year = \$20

2 Years = \$40

3 Years = \$60

See Bill Claypool NØUQ for details.

October Board Meeting Minutes

The meeting convened at 7:04 p.m. with the following people in attendance:

Club Officers:

President: Kevin Sanders, K0KDS Present

Vice President: George Noble, KK7FM Present

Treasurer: Bill Claypool, NU0Q Present

Secretary: Kirk Nelson, WL7CLI Present

Board Members:

Bruce Brumm, KCOZMT Present

Ron Hobbs, NOXWI Absent

Chuck Hoveland, W0IBG Present

Dennis O'Brien, KA0DOS Present

Craig Rose, KCOYHU Present

Ben Sinclair, KCOZMX Absent

Guests:

Dean R Madsen, NOXR.

Review of Last Meeting Minutes:

The September Board Meeting minutes were read and approved as submitted, motioned by Dennis O'Brien and seconded by Craig Rose.

Treasurer's Report:

\$10,124.46

Unfinished Business:

Chili Feed & Auction: The location and date has been secured, the food will be purchased at a date closer to the event for freshness. If any club members would like to help with the cooking they can contact Craig Rose. Kevin Sanders is coordinating for the Auctioneer.

New Business:

Des Moines Marathon event: There is still a need for 5 or 6 more operators to assist and if anyone is interested they can contact Bruce Brumm or Rick Allen. There is also a need for club members to man the DMRAA booth

Continued...

on the 14th & 15th at the event center during the pre-marathon event, those interested can contact Larry Zimmer, KAOFTO.

Polk County ARES update: No update

Subcommittee Reports:

Hamfest: Bruce Brumm and the committee are putting together a list of possible door prizes. They are looking at going with less traditional prizes such as a antenna analyzer instead of a mobile radio.

Iowa QSO Party: It was discussed having a club station operate during the Iowa QSO party scheduled for Oct 15th. It was determined that there was not enough time to set up a full station but if any club members wished to they were more than welcome to and we would look at it again for next year.

Field Day: No report at this time and the committee is open to site suggestions. The committee will start planning after the 1st of the year. It was suggested that the club look at purchasing some pushup masts in the event that the field day site does not have trees to string up antennas too.

Repeaters & Packet: Dean Madsen submitted a bill of \$251.90 for the relocation supplies he has received so far. It was approved to pay the expenses, Bruce Brumm motioned and Chuck Hoveland seconded.

Education: The Technician Level class has been canceled due to lack of students.

Program: It was felt that the September program was a great success. Mark Campbell, W0GZR, is coordinating a guest speaker for surge protection. The Chili Feed and Auction will be Novembers program and the Christmas Party will be the Decembers program. January's program will be on PIC computers and there use in Ham radio. February's program will be by the Nation Weather Service.

Communications/PR: Ben Sinclair is continuing to learn the web page.

Membership: Chuck Hoveland has emailed a revised spreadsheet of the membership roster .

Awards: The Winthrop Major award will be presented at the Christmas party. A committee of prior recipients will be appointed and nominations from club members can be submitted to the board members.

Christmas Party: It is all set with the Plymouth Congregational Church for the party to be held there. Entertainment and table decorations were discussed. The committee is open to suggestions for entertainment.

Chili Feed/Auction: Scheduled for November 22nd at the same location as last year.

Questions, comments, additions?: none

The meeting adjourned at: 7:41 p.m. Motioned by Chuck Hoveland and seconded by Dennis O'Brien.

November Board Meeting Minutes

The meeting convened at 7:00 p.m. with the following people in attendance:

Club Officers:

President: Kevin Sanders, K0KDS Present

Vice President: George Noble, KK7FM Present

Treasurer: Bill Claypool, NU0Q Present

Secretary: Kirk Nelson, WL7CLI Present

Board Members:

Bruce Brumm, KCOZMT Present

Ron Hobbs, NOXWI Absent

Chuck Hoveland, W0IBG Absent

Dennis O'Brien, KA0DOS Present

Craig Rose, KCOYHU Present

Ben Sinclair, KCOZMX Present

Guests:

Dean R Madsen, NOXR and Scott Kirstein, N0OOD.

Review of Last Meeting Minutes:

The October Board Meeting minutes were read and approved.

Treasurer's Report:

\$10,144.46

Unfinished Business:

Chili Feed & Auction: All is set except for the last minute purchase of additional plates and flatware. Also discussed was the use of PA system, one will be coordinated in case it is needed.

Christmas Party: There will be no Board Meeting in December. Dennis O'Brien is coordinating for the Church's Bell Choir to provide the entertainment. There will also be plates and flatware in case anyone does not bring their own. Beverages will be provided.

New Business:

None presented

Continued...

Polk County ARES update: Living History Farms Fun Run on November 19th and still looking for operators.

Subcommittee Reports:

Hamfest: Bruce Brumm submitted an estimate for the cost of the prizes of a MFJ-269 antenna analyzer with and connection adaptor kit and a Wauxon dual band HT with either a speaker mike or gain antenna. Budget was approved by a motion from Bruce Brumm and seconded by Craig Rose.

Field Day: No report at this time

Repeaters & Packet: Dean Madsen submitted a bill of \$237.75 for the additional supplies he has received. It was approved to pay the expenses. Kirk Nelson submitted an estimate of \$120.00 for the antenna mounting hardware for the three antennas. The mount are Ronard #2212, these are a heavier duty with Stainless steel straps. It was approved to purchase the mounts.

Education: Ron Hobbs working with the Waukee school system for a Feb/Spring Technician class. It was also discussed to have a Packet class separate from the club meeting. It was suggested it be in the spring time.

Program: January will be on PIC and micro processor applications in HAM radio. February's program will be by the National Weather Service on SkyWarn and storm spotting. The March program will be on High Altitude Ballooning.

Communications/PR: Ben Sinclair has now taken over the Static Sheet and ready to go on maintaining the clubs web page.

Membership: No report

Awards: Nominations for the Winthrop Major award are still being accepted till the end of the Chili Feed and will be presented at the Christmas party.

Christmas Party: See Unfinished Business

Chili Feed/Auction: See Unfinished Business

Questions, comments, additions?: None

The meeting adjourned at: 8:05 p.m. Motioned by Bruce Brumm and seconded by Craig Rose.

Dennis Ver Mulm gave an excellent presentation about surge suppression for homes and ham shacks at the October meeting.



DES MOINES RADIO AMATEURS ASSOCIATION

The Static sheet is bi-monthly (six per year) publication of the Des Moines Radio Amateurs Association. It is provided via email to the membership of the DMRAA. Please feel free to forward to prospective club members and interested Amateur Radio Operators.

The DMRAA is affiliated with the ARRL,

The national association for Amateur Radio.

Des Moines Radio Amateurs Assn.

P.O. Box 88

Des Moines, IA 50301

DMRAA.com

E-mail: info@dmraa.com



Membership Application

Name: _____

Address: _____

City: _____, State: _____ Zip: _____

Phone Number: (____) _____ Email: _____

Call Sign: _____ Class: (E) (A) (G) (T)

ARRL Member? Y / N

What are your primary interests in amateur radio? _____

What are you interested in learning about? _____

How would you like to volunteer with the club? _____

Dues:

\$20 Single

\$40 2 years

\$60 3 years

Mail application and payment to:

DMRAA

P.O. Box 88

Des Moines, IA 50301

Email: info@dmraa.com