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- Kevin Sanders KØKDS
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- George Noble KK7FM
Vice-President
- Kirk Nelson WL7CLI
Secretary
- Bill Claypool NUØQ
Treasurer

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- Bruce Brumm KCØZMT
- Ron Hobbs NØXWI
- Chuck Hoveland WØIBG
- Dennis O'Brien KAØDOS
- Ben Sinclair KCØZMX

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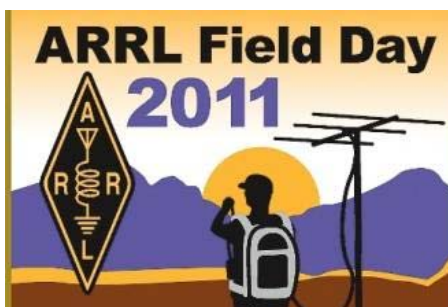
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SEPTEMBER 2011

2011 Field Day

The DMRAA held its annual Field Day on June 25-26 at Camp Dodge in Johnston. The club netted 1,448 contacts this year while operating as a 2A station, up 40% from last year's total of 1,036. In the last ten years, the DMRAA has had only one Field Day that exceeded this year's QSO amount -- in 2004 we operated as a 4A station and recorded 1,761 contacts.

We operated two HF stations, a Get On The Air (GOTA) station, plus a bonus VHF station on 6 meters. We again ran the transmitters on generator power and a solar tent provided by PowerFilm Solar in Ames. Many new faces stopped by to check in with us, including Jon Davis, deputy director of Polk County



by PowerFilm Solar crews the next day.

The DMRAA board would like to thank everyone that stopped out, operated, provided equipment, helped with the planning, set-up, and tear down --

we couldn't have had one of the most successful WØAK Field Days in recent years without you!

EMA, brass from the Iowa National Guard, and WOI-TV 5 who aired clips from Field Day on Saturday's 5, 6, and 10 o'clock newscast, and Sunday morning's newscast.

While set-up crews had to battle a light rain on Saturday morning, Field Day weekend saw no other adverse weather like last year. However, strong winds did take out the solar tent Sunday night before it was picked up

We have already started planning for next year's WØAK Field Day. If you would like to help plan next year's event, speak with a board member, write us a message on our website, or come to one of our board meetings, held on the first Tuesday of each month in the upstairs meeting room at the Windsor Heights Hy-Vee.





Come enjoy the fellowship

DMRAA meetings are the 4th Tuesday of the month. Be sure and mark your calendars!



Upcoming Meetings

August 23th 7:00 PM

Plymouth Congregational Church
42nd & Ingersoll
Waveland Room

The August program will be presented by Mike Greenwood KC4VG.

Mike will demonstrate the Buddipole portable HF antenna system and his recent DXpedition

Club Logo Wear Available Online

Interested in showing your DMRAA pride?

Check out Gold Medal ideas at <http://www.goldmedalideas.com/shop/item.aspx?itemid=366>

This will take you to the polo shirt page, but caps, jackets and other items are available with the DMRAA logo.



Future Meetings

George, KK7FM is looking for meeting ideas and presenters. Please feel free to make suggestions and offer to help with a presentation.

You can Help?



Are you interested in helping the club? There are many ways you can help. Assisting with an event, taking a few pictures or even writing a piece for this newsletter.



Recent Meetings

On June 28, just days after Field Day, Larry Zimmer KAØFTO gave a presentation on phase-shift keying (PSK). He covered general PSK operation, equipment, and also included some samples of PSK exchanges.

We met in the coffee shop at the church on July 26 for a brief overview of this year's Field Day results, talked about planning for next year's event, and watched a video produced by Gary Pearce

KN4AQ of Amateur Radio Video News on a 51A Field Day operation in Maryland, called "The Last Big Field Day."

August's presentation will be given on August 23 by DMRAA member Mike Greenwood KC4VG to talk to us about his recent DXpeditions and his use of the Buddipole. The meeting will be held in the Waveland Hall at the Plymouth Congregational Church at 42nd and Ingersoll in

Des Moines beginning at 7 p.m. Everyone is invited!





Giving back through
community service

Scott Kirstien
NØOOD
Polk County ARES EC
515 490-7414 (cell)
nood@arrl.net

Polk County ARES Meetings
Polk County EOC at
1907 Carpenter Avenue
Des Moines, IA



Polk County ARES



By the time you read this article, there will be a new repeater on the air! The 444.100 repeater which will be located at Methodist Medical center has recently been recognized by the Iowa Repeater Council, and currently this machine is sitting in my garage (it's technically on the air now, but you almost have to be in my driveway to use it). We will be relocating it to Methodist in the near future. It's callsign is KDØMYV.

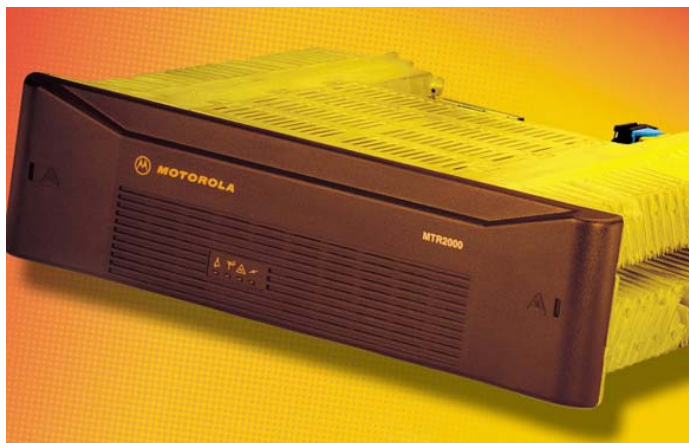
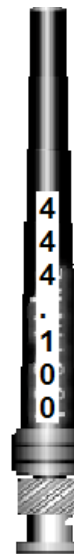
The State Fair Parade and Easter Seals Regatta, and Flatlands Youth Triathlon are the three events we have participated in since the last Static Sheet. All went well and I would like to thank Brad – KC9DMQ, Kirk – WL7CLI, Ron – NØXWI, and Marcus KCØYGS, for their leadership with these events. Obviously leadership is not a one way street, and I would also like to thank all of the operators who have given their time to help out these organizations during these events.

Upcoming events include the

Head of Des Moines Rowing Regatta on September 24th, The Asthma Walk on October 1st the Des Moines Marathon on October 16th. Stay tuned to the ARES Thursday night net for more information on these and other upcoming events. The next Polk County ARES meeting will be October 1st at 7:00pm at the Polk County EOC at 1907 Carpenter. Hope to see you there.

Scott
(515) 490-

7414



ARES MEETING DATES

October 10, 2011



2011 ARES Events

Head of Des Moines Rowing
Regatta September - 24

Asthma Walk - October 1
Des Moines Marathon
October - 16

Living History Farms Cross
Country Race November - 19



2011 DMRAA Calendar

DMRAA

22 August, 2011

Plymouth Congregational
Church
42nd & Ingersoll
Des Moines
7:00PM
Waveland Room

The August program will be
presented by

Mike Greenwood KC4VG.

DXpedition and BuddiPoles

Calendar 2011

General Meetings and Events

23 August, 2011

27 September, 2011

25 October, 2011

22 November, 2011

Chili Feed / Auction

7 December, 2011

Christmas Party

24 January, 2012

28 February, 2012

27 March, 2012

21 April, 2012 Hamfest

24 April, 2012

Board Meeting Dates

5 July, 2011

2 August, 2011

6 September, 2011

4 October, 2011

1 November, 2011

3 January, 2012

7 February, 2012

6 March, 2012

3 April, 2012

1 May, 2012

5 June, 2012

3 July, 2012



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.

President's Soapbox

We're coming up on Labor Day weekend, which means the trees will soon start dropping their leaves, the days will be getting shorter, and the nights will be getting colder. It also means that a lot of us will be getting ready to hunker down in our ham shacks for the colder months.

Some of that preparation is completing projects we've been working on since spring (or starting on them at the last minute!). To some, that might mean finishing up some tower and antenna work before it gets too cold.

Before we start climbing or soldering, it's important to keep safety in mind year-round.

Unfortunately, we have heard of fellow hams who have been injured or killed this year while completing tower work. Most

recently, one ham was killed and another injured in a terrible accident in South Dakota, where they were dismantling a 110-foot tower when a gust of wind toppled the tower, trapping both hams underneath. The ham that was killed was the president of the local amateur radio club; the survivor of the accident was also a member.

Two other hams were electrocuted during this year's Field Day weekend in Texas when an antenna they were setting up was also caught by a gust of wind and blown into nearby electrical lines. Those two hams are doing just fine today, but no one wished it would happen in the first place.

We, as hams, need to be the experts in our field. Not experts on just radio frequency, propagation, and the like, but also in engineering safety. While the hams in our area practice extreme caution and

care when maintaining their stations, it's never a bad idea to review safety precautions and have a fellow ham to help you and to act as a "safety officer."

Happy antenna-raising!

73,

Kevin, KØKDS



*Even if
you're on
the right
track, you'll
get run over
if you just
sit there!*

Will Rogers



**Kevin Sanders
KØKDS**



Have you
checked into a
net lately? ➔

*ARES Nets serve
several purposes*

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

Please check in!

Area Nets

AMES

Sunday	147.240+	7:00pm	Story County ARES Net
Wednesday	147.375+ t 114.8	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- t 114.8	8:00pm	Central Iowa ARES Net
Sunday	146.940- t 114.8	follows ARES net	Central Iowa Technical Net
Sunday	146.610- t 114.8	9:00pm	ARTS Net
Thursday	146.940- t 114.8	7:00pm	Polk County ARES Net

MARSHALLTOWN

Sunday	147.135+ t 141.3	6:00pm	CIRAS Net,
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PERRY

Monday	146.610- t 114.8	8:00pm	Dallas County ARES Net
Monday	146.610- t 114.8	follows ARES net	HARC Net

WEBSTER CITY

Monday	147.015+	7:00pm	Hamilton County Radio Club Net
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STATEWIDE NETS

Monday—Saturday	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

Amateur Radio Testing Sessions

Des Moines 1:00pm

09/18/2011 1:00pm

11/20/2011 1:00pm

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

Location: Johnstone Supply Classroom (2nd floor)

11000 Justin Drive

Urbandale, IA 50322

Contact: Rick Allen NØCFL

(515) 795-2162

n0cfl@arrl.net

Ames 7:00pm

Saturday, September 17, 10:00 AM

Tuesday, November 15, 7:00 PM

1304 Howe Hall, Iowa State campus

Contact:

George Oster, NP2N

515-233-3535

Boone 9:00am

Saturday, Oct 8, 9 AM

Saturday, Dec 10 9AM

Location:

Kruck P&H Warehouse Office,
807 6th St., Boone, Iowa
Talk-In: 146.850

Contact:

Steve NØNEU

(515) 432-4006

Need to find a new home for your extra gear?

This Buy, Sell & Trade page may be your answer. This service is offered to DMRAA members.

Contact
info@DMRAA.com



Time to Eat?

Iowa Ham of the Year

The Iowa Ham of the Year is intended to recognize an Iowa ham, who has demonstrated his or her tremendous dedication to Amateur Radio through his or her activities.

Requirements Nominees for the Iowa Ham of the Year must meet the following requirements to be considered for this award:

- * A current Iowa resident
- * A licensed Amateur Radio operator
- * A member in good standing with the

ARRL Timeline

* Nominations (including the nomination form and any supporting documentation) for the Iowa Ham of the Year must be submitted on or before March 15, 2012.

* The nominee of the winner will be notified by April 5, 2012.

* The official presentation and announcement of the award will be at the DMRAA Hamfest in Des Moines, Iowa, on Saturday, April 21, 2012.

Additional Information

* Although all accomplishments and activities will be considered, the concentration should be on those activities that took place within the past calendar year, and it should be noted when each activity occurred.

* The judges will select an award recipient based on their involvement in ham radio, especially community service, promotion, operating, technical knowledge, volunteerism and enthusiasm.

* All decisions of the judges are final.

* Nominations and all accompanying material must be mailed to Iowa Ham of the Year Committee, PO Box 81 Dunkerton, IA 50626 or e-mailed to ke0j@dunkerton.net on or before March 15, 2012.

* Any questions about the award or nomination process should be directed to Joe Hoepfner, AJØHH via e-mail to ke0j@dunkerton.net.

Buy / Sell

Tower Available

I have a 56 foot, free standing aluminum tower made by Heights Towers. Two 18 inch sections, one with top for mast: two 22 inch sections, one tapered to 18". Two 26 inch sections, one tapered to 22". Also, a rotor mount plate. Wind load rating is 18sq. ft. at 80 MPH. Tower is missing cement base legs. I've emailed Heights to see if available, or they may have to be made. Would you know of someone interested in this tower. Haven't decided price, but very reasonable.

John Wildman WBØNLC
johnrwildman@hotmail.com



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.

Caution! Considerable amount of amateur radio topics will be discussed.





Ham Radio in the 21st Century

Board Meeting Minutes

Board Meeting Minutes Minutes – July 5, 2011

The meeting convened at 7:00 p.m. with all elected officers and board members in attendance.

Guests in attendance:

None.

Review of Last Meeting Minutes:

The May Board Meeting minutes were read and approved, motioned by Ron Hobbs, NOXWI and seconded by Dennis O'Brien, KA0DOS.

Treasurer's Report:

\$10,834.38

Unfinished Business:

Field Day: Ron Hobbs commented that it was great time. Dean Madsen, NOXR, suggested having teams designated for specific tasks for setup and tear down. This should make it more organized, safer and faster. Dean provided a report on Field Day statistics. The report showed that there not many on the GOTA station. It was reported that it 40 meters was rather noisy which might have been due to the building's transformer right next to the tower. Some comments on it 'just didn't feel right' being in a air conditioned building with good lighting. George Noble, KK7FM, suggested that we try for a 3A site next year and we set some type of goal to beat. It was suggested we could work more digital modes and improve

the VHF/UHF station and possibly add a 10 meter station. Along with that it was suggested that the type of antennas and the supports be looked at to see what might work better. Also suggested that a sites be looked for that is more accessible to the public. Chuck Hoveland, KD0SSH, and Dennis O'Brien provided and prepared much of the food at no cost which helped reduce the total cost of field day. Some comments were reported that while the food was good it was a little lack luster for sides.

Packet Radio: Letter to Lutheran hospital was delayed due to field day commitments.

New Business:

Insurance on Treasurer: The insurance will laps on 8/1/2011 if not renewed. It was decided to let the insurance on the treasurer position lapse.

Polk County ARES update: No report

Subcommittee Reports:

Hamfest: No report

Field Day: See Unfinished Business.

Repeaters & Packet: See Unfinished Business.

Education: The committee is looking at conducting a Technician License class with the Des Moines Education and an Extra upgrade class over the clubs repeater. \$942.00 was raised from the sale of the donated equipment at Dayton. It was discussed to reimburse students for the class if they pass. There is interest in having a CW class but they are not yet sure of how to conduct it.

Program: July's program will be on Field Day and suggestions from the club for future programs. Ideas presented at the board meeting were storage batteries, remote radio operations, and a in depth report on a ARES event.

Communications/PR: No report.

Membership: A membership roster is still being created.

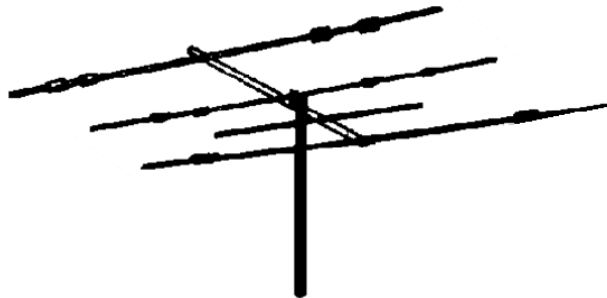
Awards: No report, the next award is the Winthrop Major award presented at Christmas time.

Christmas Party: Will be at the Church on December 6th.

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

Questions, comments, additions?:

None
The meeting adjourned at: 8:51 p.m.



*The Des Moines
Radio Amateurs
Association
board meets
monthly in the
upstairs
conference
room at the
Windsor Heights
Hy-Vee on
University
Avenue in
Windsor Heights*



Ham Radio in the 21st Century

Board Meeting Minutes

Board Meeting Minutes Minutes – August 2, 2011

The meeting convened at 7:00 p.m. with all elected officers and board members in attendance.

Guests in attendance:

Scott Kirstein, N0OOD and Dean Madsen, N0XR.

Review of Last Meeting Minutes:

The July Board Meeting minutes were read and approved with spelling correction of "lapse" and correction of Chuck Hoveland's call sign to W0IBG, motioned by Dennis O'Brien, KA0DOS and seconded by Chuck Hoveland, W0IBG.

Treasurer's Report:

\$10,364.46

Unfinished Business:

Field Day: Fuel expense for generator was donated by Scott Kirstein, N0OOD. It was also requested that the club look for additional locations that are more accessible to the public than Camp Dodge.

Packet Radio: A draft letter to Lutheran Hospital was submitted for review and suggestion (attached in records). It is being reviewed before final letter is submitted to Lutheran Hospital.

New Business:

Old Static Sheets:

Bruce Brumm, KC0ZMT reported that he had several back issues of the Static Sheet to add to the club's history. He had been planning on scanning them into pdf files but had not had the time to do so. They were given to Kirk Nelson, WL7CLI to add to the records.

George Noble, KK7FM asked for any input for the Club Contest so did not think the club would be making a submission.

Polk County ARES update:

Scott Kirstein, N0OOD reported that the State Fair Parade was all set for Aug 10th. He reported that the Big Creek Triathlon had been canceled this year. He also stated that more events are listed on the Polk County Iowa ARES web page under Local events. Also the 444.1 repeater has been installed at Methodist Hospital for ARES operations.

Subcommittee Reports:

Hamfest: The State Fair site has been reserved but not paid for.

Field Day: See Unfinished Business.

Repeaters & Packet: See Unfinished Business.

Education: The dates have set with the Des Moines Education

system for the Technician License class this fall. They are proceeding with plans for an Extra Class License study group to be held on the 146.94/34 repeater.

Program: The August program will be presented by Mike Greenwood, .

Communications/PR: No report.

Membership: The membership roster is almost complete.

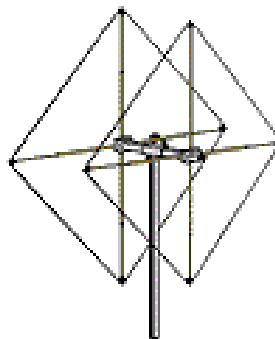
Awards: A committee will be assembled.

Christmas Party: Will be at the Church on December 6th.

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

Questions, comments, additions?: None

The meeting adjourned at: 8:11 p.m. Motioned by Ron Hobbs and seconded by Chuck Hoveland.



*The Des Moines
Radio Amateurs*

Association

board meets

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upstairs

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Hy-Vee on

University

Avenue in

Windsor Heights

2011 Field Day



WHAT IS IT?

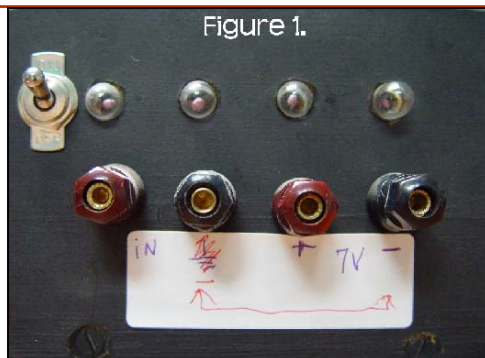
A 4 Bit Binary Counter.

By KAØFTO Larry

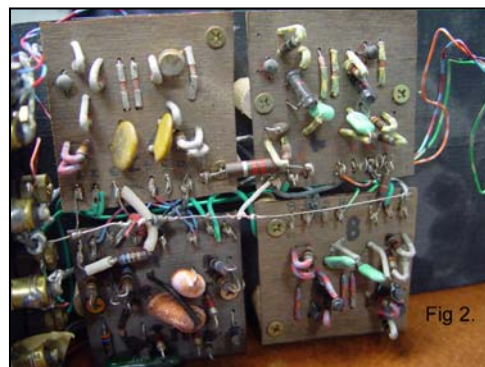
4 Bit Binary Counter made up of divide by 2 discrete circuits. Useless stuff or a building block for computers?

In the July Static Sheet I showed you some photos of this unit. I will now show you the circuitry. Yes some one did guess what it was and took away the grand prize. A few thought it was a power supply. HA. In **Figure 1** note the old fashioned bulbs and that actually have a value left to right of 8, 4, 2, and 1. The right hand bulb would be the least significant number or 0 or 1 and the left hand bulb would have the most significant value of 0 or 8. This circuit counts 0 to 15 then starts over. The values are added. An example would be 0 1 1 0 with the 1 indicating the blub that is lighted. The value indicated would be 6. In other words bulb 4 and 2 are lighted. The binding post left to right are- IN=Input or clock input, the ground symbol is the other side of the clock input. The + is the positive 6-12 volt power and the last binding post is the- of the power.

If you look closely at **Figure 2**



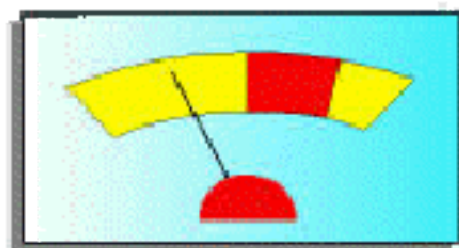
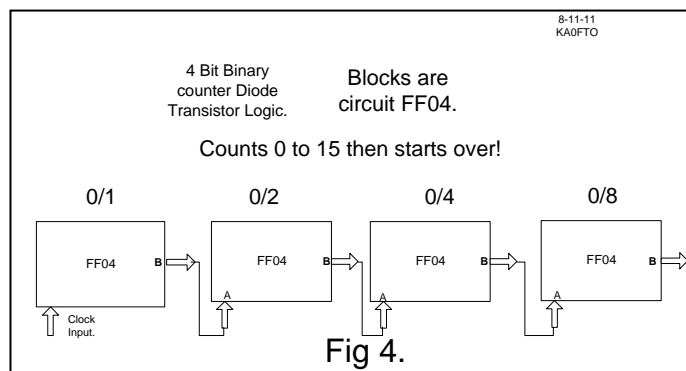
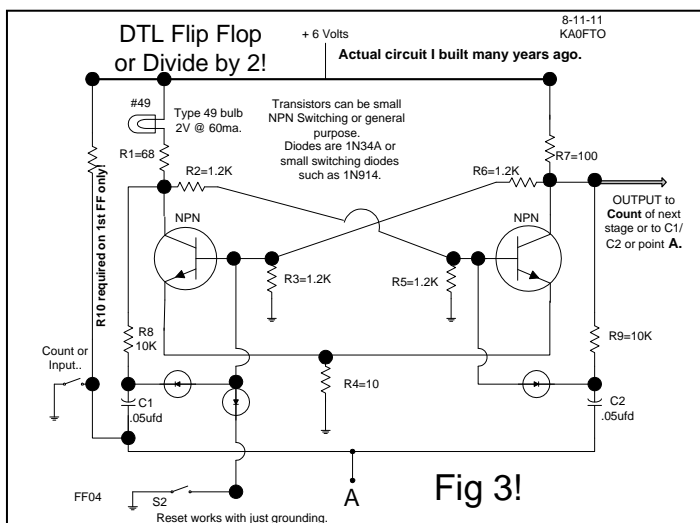
you can just make out the number 1, 2, 4, and 8 on the circuit boards. Board 1 is bottom left, board 2 is upper left, board 4 is upper right, and board 8 is bottom right.



Now for the circuitry. **Figure 3** show is the actual circuit that I built on my Formica circuit boards. I of course used point to point wiring and the Formica is sturdy and is not bothered with a soldering iron. Note the schematic shows +6 volts but it will work 4-12 volts. At the DMRAA meeting when I demonstrated the circuit I clocked with just 555 integrated circuit type clock at point **A**. There is actually 4 of these circuits and are connected as shown in **Figure 4**.

Figure 4 is how the 4 individual circuits were connected together.

All 4 of these could be replaced by two each 4027 type CMOS integrated circuits chips and using 4 external resistors and LED's. That is for another time. The operating voltage could be 5-12 volts. The last time I saw a price on the 4027 units they were about \$.50 each. I am sure there are other IC's that would have all 4 in one package. I just happen to have the 4027's in my junk box now. Back then they were quite expensive.



AMSAT News

ARISSat-1 is the newest amateur radio satellite to be deployed into space, and is now broadcasting signals after an eventful deployment on August 3.

The mission did have some drama before it was pushed out the door of the International Space Station. Russian cosmonauts Sergei Volkov RU3DIS and Alexander Samokutyaev were concerned when ARISat-1 had only a 2-meter antenna -- it was also supposed to have a 70-centimeter antenna.

US Mission Control in Houston originally delayed the deployment, but after discussion with the teams in Houston and Moscow were going to deploy the satellite during a spacewalk regardless of the missing antenna.

According to US Mission Control, there may only be a loss in data that can be downloaded from the satellite and there was also a concern that the transponder may not be operational, but amateur radio operators on earth have been able to copy the transponder.

ARISSat-1 will be in high-power mode when in the sun, and go into low-power when in eclipse. Amateur radio operators will be able to copy voice, BPSK and SSTV



messages when overhead.

Here is information on ARISSat-1's modes and frequencies:

145.950 MHz FM Downlink: FM transmissions will cycle between a voice ID as RS01S, select telemetry values, 24 international greeting messages in 15 languages, as well as SSTV images. If you successfully receive the SSTV transmissions, you are invited to upload your picture to the ARISS SSTV Gallery (<http://www.amsat.org/amsat/ariss/SSTV>).

435 MHz - 145 MHz Linear Transponder: The linear transponder will operate in Mode U/V (70 cm up, 2 meters down). It is a 16 kHz wide inverting passband and the convention will be to transmit LSB on the 435 MHz uplink and receive USB on the 145 MHz downlink.

145.919 MHz/145.939 MHz CW Beacons: The CW transmissions will be call sign ID RS01S, select telemetry and call signs of people actively involved with the ARISS program.

145.920 MHz SSB BPSK-1000 Telemetry: The BPSK transmissions will feature a new 1kBPSK protocol developed by Phil Karn, KA9Q. When the CW2 beacon on 145.919 MHz is active, this indicates that the BPSK-1000 format is being transmitted. If the CW1 beacon on 145.939 MHz is active, the backup of BPSK-400 format is being transmitted.

AMSAT has published a "how-to" guide for reaching ARISSat-1 on their website: <http://www.amsat.org/amsat-new/ARISSat/ARISSatHowTo.php>

DMRAA/HARC Antenna/Potluck Picnic

DMRAA/HARC Antenna/Potluck Picnic



When: September 17th. 1 PM to about 7:30 PM, eat around 5 PM.

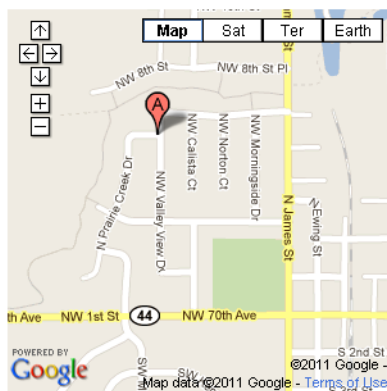
Where: KC0TPV's QTH, 522 NW 6th St (Place), Grimes, IA – On street parking.

Here's your chance to bring out and test that special antenna/radio project (or something crazy you are working on) and have some great food and fellowship.

There will be electric available and one or two screen shelters to be in. There are a tree or two and a 2nd level deck to tie to for antennas or bring a pole to setup.

We look to have a potluck meal around 5, so bring your grill, meat and food to share with everyone. Some tableware will be provided and maybe one grill.

Everyone is welcome. See you there



What does a Volunteer Examiner (VE) do?



Volunteer Examiners (VEs) are licensed radio amateurs holding a General Class license or higher who offer their time to administer the FCC licensing tests. Learn how you can **become a VE** associated with the ARRL Volunteer Coordinator office (VEC) by reviewing our **[Volunteer Examiner Manual](#)**.

Relying on the training and experience of ARRL VEs who conduct FCC license exams, ARRL also authorizes our VEs to conduct exam sessions for ARRL's Amateur Radio Emergency Communications Course. An additional registration with ARRL's Continuing Education Program is required. Find more information at **EmComm Field Exam Resources**.

ARTS & DMRAA Field Day 2011 Statistics

ARTS & DMRAA Field Day 2011 Statistics

QSO Breakdown by Band and Mode

W0AK			
Band	CW	SSB	Total
3.5	18	2	1
7	501	7	508
14	426	131	557
21	18	105	123
28	182	0	182
50	18	31	49
Total	1163	276	1439

W0SCI (GOTA)	
Band	SSB
7	8
21	1
Total	9

Comparison

Year/Category	PSK31	CW	SSB	Total
2002 (3A)				920
2003 (3A)				760
2004 (4A)				1761
2005 (4A)				650
2006 (4A)				1156
2007 (4A)				1272
2008 (4A)	0	658	51	709
2009 (2A)	1	671	243	915
2010 (2A)	0	671	365	1036
2011 (2A)	0	1163	285	1448
2010 - 2011				
% Change	NAC	+73%	-22%	+40%

Totals

Call	CW	SSB	Total
W0SCI	0	9	9
W0AK	1163	276	1439
Total	1163	285	1448

W0AK QSO Breakdown by Date, Hour and Band

Date	Hour	Total	3.5	7	14	21	28	50	Running Total
6/25/2011	18	35	0	2	33	0	0	0	35
6/25/2011	19	80	0	0	77	3	0	0	115
6/25/2011	20	70	0	0	58	12	0	0	185
6/25/2011	21	57	0	0	50	6	0	1	242
6/25/2011	22	68	0	0	61	7	0	0	310
6/25/2011	23	44	0	0	22	17	0	5	354
6/26/2011	0	102	0	0	76	18	0	8	456
6/26/2011	1	59	0	4	50	0	0	5	515
6/26/2011	2	54	2	42	0	0	0	10	569
6/26/2011	3	98	0	75	22	0	0	1	667
6/26/2011	4	73	0	44	29	0	0	0	740
6/26/2011	5	26	0	22	4	0	0	0	766
6/26/2011	6	68	0	45	23	0	0	0	834
6/26/2011	7	27	0	27	0	0	0	0	861
6/26/2011	8	42	0	33	9	0	0	0	903
6/26/2011	9	54	0	39	15	0	0	0	957
6/26/2011	10	34	0	31	3	0	0	0	991
6/26/2011	11	48	18	28	2	0	0	0	1039
6/26/2011	12	61	0	52	8	0	0	1	1100
6/26/2011	13	58	0	37	9	0	0	12	1158
6/26/2011	14	53	0	27	0	13	11	2	1211
6/26/2011	15	96	0	0	0	14	82	0	1307
6/26/2011	16	63	0	0	0	8	54	1	1370
6/26/2011	17	69	0	0	6	25	35	3	1439
Total	All Hours	1439	20	508	557	123	182	49	

Other Iowa Stations worked: N0HR, N0DJY, W0CS, W0MWL, & W2FU

Skimmer Spot Analysis for W0AK

Most have seen CW Skimmer software either during Field Day or during the Software Defined Radio program this past winter. On application of the data collected by the software is to compare signal strength. If we look at the signal strength reported for other Iowa stations that we worked on CW during Field Day or usually operate CW during Field Day we can see how our CW setup compared to other Iowa stations. For this analysis we will use W0MWL a portable operation from Marshalltown, N0HR a permanent station with a 70ft tower near Ames, W2FU a portable B class station, N0DJY a permanent station south of Newton, W0CS a fixed station location operated by the Clinton Amateur Radio Club and W0YL the Ames Club that normally operates F class from the Red Cross.

W3LPL Glenwood, Maryland 06/25/2011



W0AK is heard steadily Saturday and is significantly louder than W2FU a 1B class station.

W271 Pipersville, Pennsylvania 06/25/2011



W0CS, a permanent home station, has a stronger signal than W0AK on 20m. W2FU another portable operation has a weaker signal than W0AK.

N7TR Reno, Nevada 06/25/2011



W0AK is the only focus group station heard.

WE4S Rock Spring, Georgia 06/25/2011



W0AK has a stronger signal than W2FU.

S50ARX Nova Gorica, Slovenia



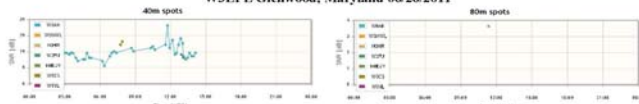
W0AK is the only focus group station heard by the DX station.

GW8IZR Westhoughton, Wales



W0AK is the only focus group station heard by the DX station.

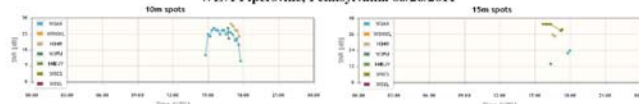
W3LPL Glenwood, Maryland 06/26/2011



W0AK is heard regularly with moderate signal strength. W0CS, a permanent home station, is heard a little louder than W0AK and W2FU, another portable station is heard at about the same strength as W0AK.

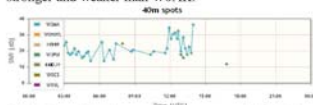
W0AK is heard just above noise level during the brief operation on 80m.

W271 Pipersville, Pennsylvania 06/26/2011



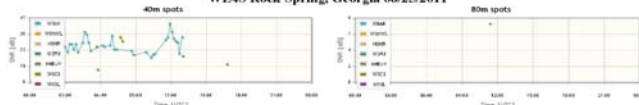
W0CS has a consistently stronger signal from the permanent location while W2FU's signal varies stronger and weaker than W0AK.

W0CS and N0HR operating from permanent station locations have a signal strength advantage over portable operations of W0AK and W2FU.



W0CS has a little better signal as expected. W0AK is stronger than W2FU.

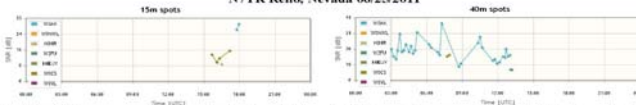
WE4S Rock Spring, Georgia 06/25/2011



W0CS has a little better signal as expected. W0AK is stronger than W2FU.

W0AK is heard just above noise level during the brief operation on 80m.

N7TR Reno, Nevada 06/25/2011



The fixed stations appear to lose their advantage to the west.

W0AK has a stronger signal than W0CS's fixed station or the W2FU portable.

We worked several of the Iowa stations, yet they don't show up as having been spotted. This could be because they never CQed. The software only spots the CQing stations, so if the operators weren't comfortable with their CW skills to CQ, then they would likely not get spotted tuning the band and working stations. You can see the segments of line without a dot on the W0AK 40m graphs when the station wasn't CQing and trying to tune and work stations.

What does this mean? Unfortunately, the "db" the software uses is not true db and the calculations using db do not hold true. From observing the data, we can take pride that the temporary station we setup put out a good signal and in many cases not much worse than some fixed stations. We should be motivated to continue our efforts to improve our Field Day station over the previous year. The effort of hanging the dipole from the next higher branch may equate to a stronger signal.

Some of the CW operators suspected the club's beam was finally tuned, really working and we were "loud" based on the number of stations working us multiple times (this is about 50 contacts that don't count towards the score). These results would tend to support that notion.



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Can you hear me now?

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.



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Des Moines Radio Amateurs Association

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? _____

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