

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

Totals

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

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	N/C	+73%	-22%	+40%

W0AK QSO Breakdown by Date, Hour and Band

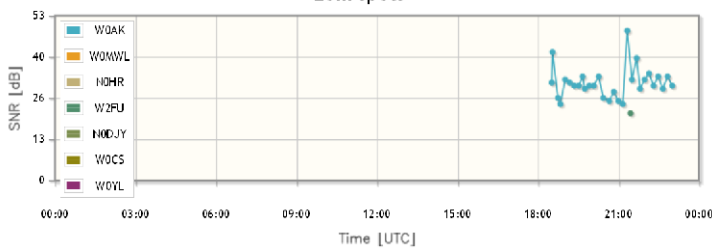
Date	Hour	Total	3_5	7	14	21	28	50	Running Total
6/25/2011		18	35	0	2	33	0	0	35
6/25/2011		19	80	0	0	77	3	0	115
6/25/2011		20	70	0	0	58	12	0	185
6/25/2011		21	57	0	0	50	6	1	242
6/25/2011		22	68	0	0	61	7	0	310
6/25/2011		23	44	0	0	22	17	5	354
6/26/2011		0	102	0	0	76	18	8	456
6/26/2011		1	59	0	4	50	0	5	515
6/26/2011		2	54	2	42	0	0	10	569
6/26/2011		3	98	0	75	22	0	1	667
6/26/2011		4	73	0	44	29	0	0	740
6/26/2011		5	26	0	22	4	0	0	766
6/26/2011		6	68	0	45	23	0	0	834
6/26/2011		7	27	0	27	0	0	0	861
6/26/2011		8	42	0	33	9	0	0	903
6/26/2011		9	54	0	39	15	0	0	957
6/26/2011		10	34	0	31	3	0	0	991
6/26/2011		11	48	18	28	2	0	0	1039
6/26/2011		12	61	0	52	8	0	1	1100
6/26/2011		13	58	0	37	9	0	12	1158
6/26/2011		14	53	0	27	0	13	2	1211
6/26/2011		15	96	0	0	0	14	82	1307
6/26/2011		16	63	0	0	0	8	54	1370
6/26/2011		17	69	0	0	6	25	35	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

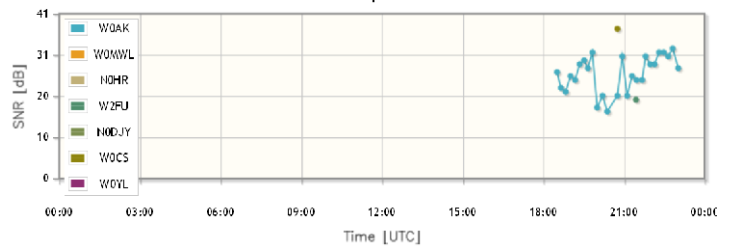
Most have seen CW Skimmer software either during Field Day or during the Software Defined Radio program this past winter. On application of the data collected by the software is to compare signal strength. If we look at the signal strength reported for other Iowa stations that we worked on CW during 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 W0MWWL 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
20m spots



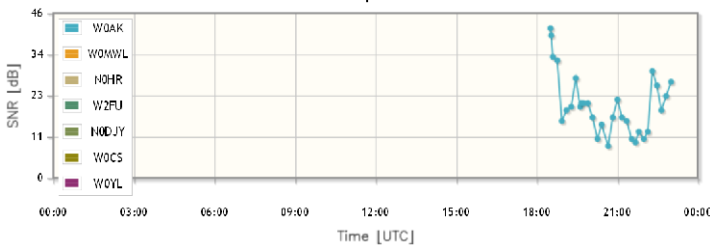
W0AK is heard steadily Saturday and is significantly louder than W2FU a 1B class station.

WZ7I Pipersville, Pennsylvania 06/25/2011
20m spots



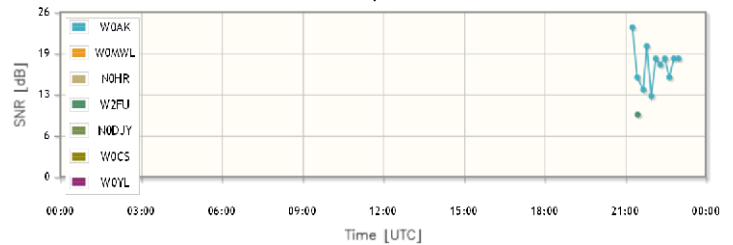
W0CS, a permanent home station, has a stronger signal than W0AK on 20m. W2FU another portable operation has a weaker signal than W0AK.

N7TR Reno, Nevada 06/25/2011
20m spots



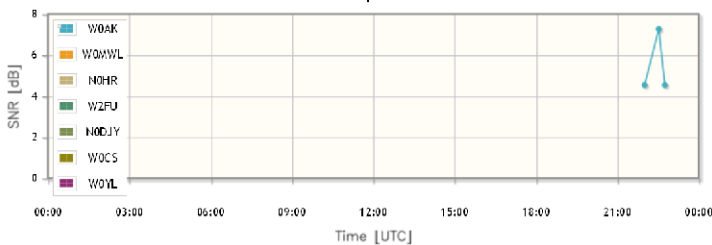
W0AK is the only focus group station heard.

WE4S Rock Spring, Georgia 06/25/2011
20m spots



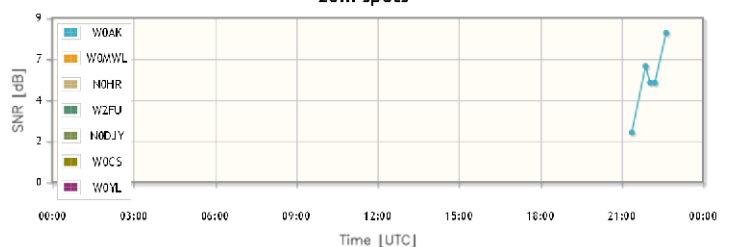
W0AK has a stronger signal than W2FU.

S50ARX Nova Gorica, Slovenia
20m spots



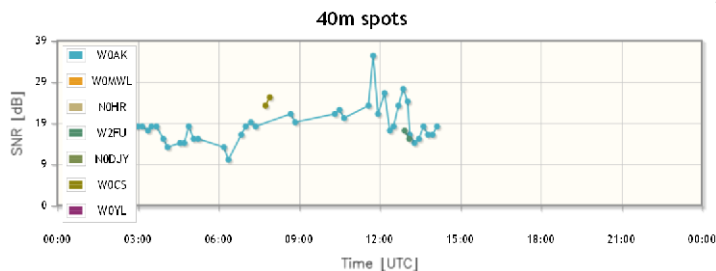
W0AK is the only focus group station heard by the DX station.

GW8IZR Westhoughton, Wales
20m spots

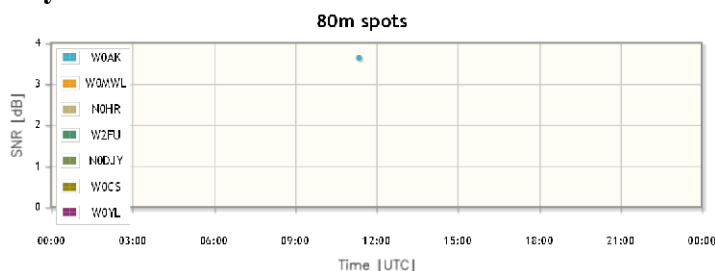


W0AK is the only focus group station heard by the DX station.

W3LPL Glenwood, Maryland 06/26/2011

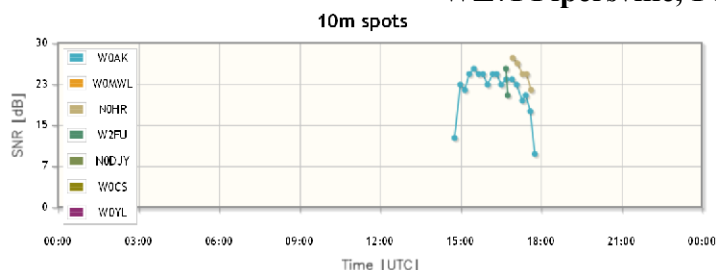


W0AK is heard regularly with moderate signal strength. W0CS, a permanent home station, is heard a little louder than W0AK and W2FU, another portable station is heard at about the same strength as W0AK.

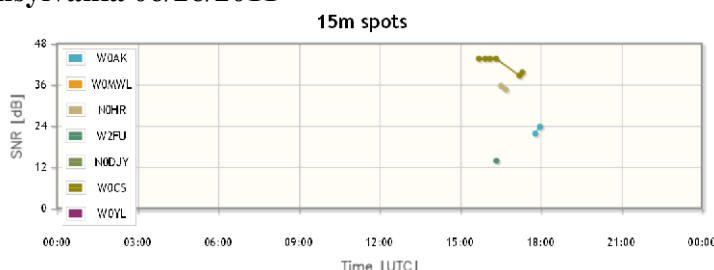


W0AK is heard just above noise level during the brief operation on 80m.

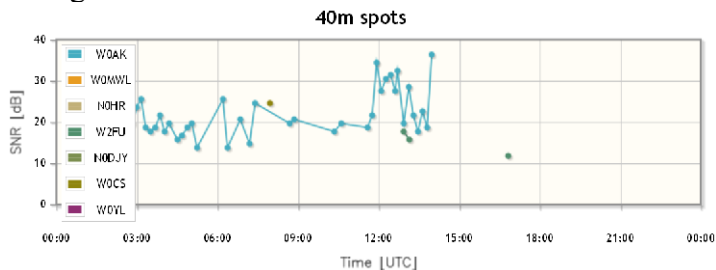
WZ7I Pipersville, Pennsylvania 06/26/2011



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

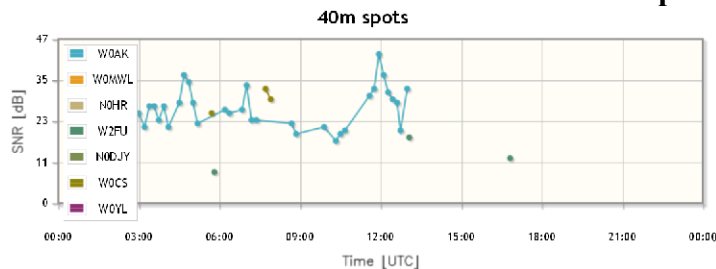


W0CS and N0HR operating from permanent station locations have a signal strength advantage over portable operations of W0AK and W2FU.

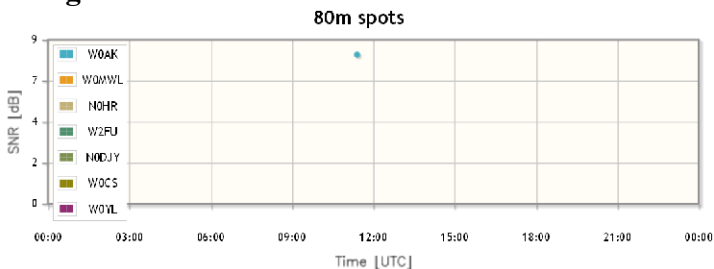


W0CS has a little better signal as expected. W0AK is stronger than W2FU.

WE4S Rock Spring, Georgia 06/25/2011

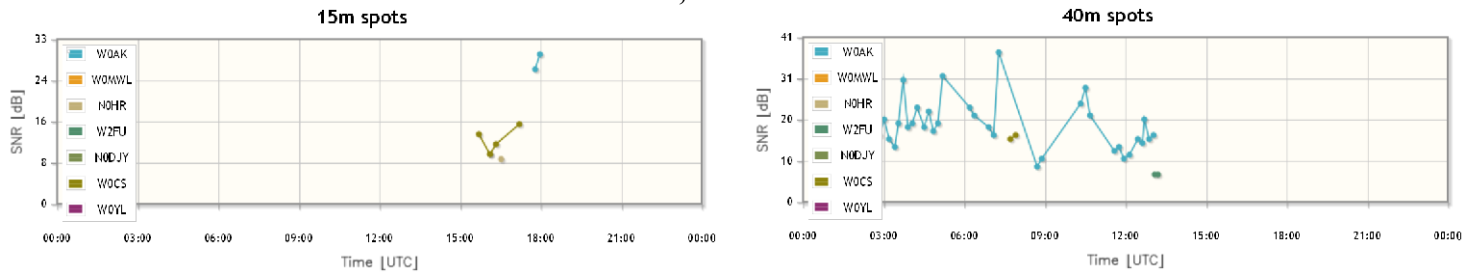


W0CS has a little better signal as expected. W0AK is stronger than W2FU.



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.