

# 2017 BCARES Repeater Run

## Summary Results

On February 4, 2017 BCARES conducted the first annual Repeater Run for Boone County. This exercise consisted of checking in by roll call across a number of regional repeaters to evaluate our capabilities and insure proper programming of radios.

We included 9 VHF repeaters and 3 UHF repeaters which potentially could provide emergency communications in times of our need in Boone County. This is not an exhaustive list of such repeaters, and others may need to be added to the next Run.

Each operator was asked to check in from a home QTH and to score his/her reception of received signals by repeater for each participating operator as we visited each of the 12 repeaters. Scoring was from 1 for Full Quieting to 5 for no copy. The Run took place from 11:00 to 12:30, with 22 operators checking in and participating throughout the run. If one could not hear a certain repeater, then they would go to the next in the list (precisely provided so that all radios could be programmed correctly for the Run) and wait for the Run there.

Reports were tabulated on spreadsheets for those reporting. An example summary of the reports is given in Figure 1. An average score of less than 3 is necessary for the repeater to be seen as a resource to include in our BCARES Emergency Communications plan. Averaging the scores for each operator (across the rows) gives a view of how well each operator can utilize these repeaters.

### **Results:**

Analysis of the data shows that in general the Jefferson City and Rolla repeaters are not useable for us. Only 5 or 6 of our operators could communicate with the VHF JC repeater and fewer with the others. The two UHF repeaters average score was skewed by the fact that about 7 of the participants did not have UHF capability. Taking that into account the Ashland 444.175 Repeater scored the best score. Taking all participants into account the repeaters ranked – 146.76, 146.61, 147.36, and 147.255 – all less than two, and 147.315, 444.425, and 444.175 less than 3; giving us 7 repeaters in the area with 22 operators that could be useful for communications in time of need.

### **Negatives:**

The only disappointing result in the analysis was that the repeater which we are to use to report to the NWS, Linn: 145.39 did not score less than three for these 22 operators. Some operators were using HT radios which could not expect to reach the Linn repeater, and some were just too far away from it for a reliable connection. Seven operators did not have UHF capability.

### **Positives:**

It was remarkable to see 22 operators in our community participate in the Run. This included 4 operators from Howard County, two from Callaway County and one from Cole County.

The Mexico repeater scored well in the Run and might also provide us a path to the STL NWS when needed.

The UHF repeaters scored very well for those operators that had UHF capabilities, especially the Ashland: 444.175. That repeater seems to cover all of Columbia using HTs on the HT antenna.

### **Future:**

There are even more repeaters in our area that we could include in the next Run for evaluation and preprogramming our radios. There is even a 6M repeater from the Ashland area with a large coverage area.

See the spreadsheet example of reporting reception from KF5KI.



ABOSE 4 Feb 2017 Repeater Run

Call Sign	K0SI	K4CHS	BOONEVL	FULTON	LINN	MEXICO	MOBERLY	JC	ROLLA
ABOSE									
ACOMP	1	4	0	0	0	0	0	0	0
ADOFX	3	3		0	0	1	2	0	0
ACOUK		1	2	0	0	1	0	0	0
KCOLYA	1	1	2	1	1	1	2	1	2
KD0BVQ	2	3	2	3	0	2	0	0	0
KE0DAZ		1	4		0	2	0	0	0
KE0IPM									
KE0DHO		1	1	2	1	2	0	2	2
KE0FPP	1	1	1	1	4	1	1	0	0
KE0IKE	1	1	1	2	1	2	1	2	2
KF5KI	1	1	1	1	3	1	2	0	0
KM0MVR	1	1	1	1	3	1	1	0	0
KOATS	1	1	1	3	0	1	1	2	2
KV0S	1	0	1						
W9TIG	1	1	1	1	0	1	0	0	0
WD6BGN	1	1	1	1	0	1	1	0	0
WH6EB	1	1	0	2	0	3	0	0	0
W0TES	1	1	1	2	1	1	0	0	0
NOOFJ		1	1	1	0	2	3	0	0
KD0GOL			2	1	1	1	0	1	2
KE0IKF	1	1	1	0	0	2	3	0	0

0.857143

**Repeater Run from Columbia BCARES sites]**

	K0SI	K4CHS	COL-Int-tie	Boonville	Fulton	Linn KM0HP	Ashland	Mexico	Moberly	JC	St Mary's	Rolla	BCARES KC0YNS/P	WX0BC D- Star	WINLINK 145.03 & 144.970
	146.76	146.61	444.425	147.36	147.315	145.39	444.175	147.255	147.090	147.00	442.15	146.790	442.125	442.325	
	(-) PL 127.3	(-) PL 127.3	(+) PL 77.0	(+)	(+)	(-) PL 127.3	(+) PL 107.2	(+)	(+)	(-) PL 127.3	(+) PL 127.3	(-) PL 127.3	(+) PL 127.3		
channel	(1)	(2)		(3)	(4)	(5)		(6)	(7)	(8)		(9)			
AB0SE	1	2	not	1	2	nothing	not	late	3	1	not	0			
AC0MP	1	2	working	4	0	heard	working	missed	3	0	working	0			
AD0FX		2		3	0			missed	3	0		0			
AB0UK	1	2		2	0			missed	0	0		0			
KC0LYA	1	2		2	2			2	3	1		2			
KC0YNS	0														
KD0BVQ	----	-----		----	----			----	nh	nh		nh			
KD0DAZ	1	2		3	0			3	0	0		0			
KD0FAR	1														
KD0ITM	1														
KE0DHO	2	2		2	3			2	0	2		2			
KE0FPP	1	2		1	2			2	3	0		0			
KE0IKE	1	1		2	2			2	3	1		3			
KF5KI	1	1		1	2			2	3	0		0			
KM0MVR	1	2		1	2			2	2	0		0			
K0ATS	2	1		1	2			2	3	2		3			
KV0S	1	2		2	0			0	0	0		0			
W9TIG	1	1		1	2			2	0	0		0			
WD6BGN	1	1		1	2			2	2	0		0			
WH6EB	1	1		0	2			3	0	0		0			
W0TES	1	1		1	2			2	0	0		0			
N0OFJ	1	1		1	2			2	3	0		0			
KD0GOL	2	0		2	1			2	0	1		2			
KE0IKF	2	2		1	0			2	3 or 4	0		0			
N0AXZ	1	1		1	2			2	3	0		0		X	X
K0ATS										2		3			

Repeater Run from Columbia BCARES sites

		1 - Full Quieting	2 - Some Noise Good Copy	3 - Noisy copiable	4 - Too Noisy to Copy	0 - N0 Copy				BCARES	WX0BC	WINLINK					
		K0SI	K4CHS	COL-Int-tie	Boonvill	Fulton	Linn KM0HP	Ashland	Mexico	Moberly	JC	St Mary's	Rolla	KC0YNS/P	D-Star	145.03 &	
WD6BGN NE Howard Co.		146.76	146.61	444.425	e 147.36	147.315	145.39	444.175	147.255	147.090	147.00	442.15	146.790	442.125	442.325	144.970	
		(-) PL 127.3	(-) PL 127.3	PL (+) 77.0	(+)	(+)	(-) PL 127.3	(+) PL 107.2	(+)	(+)	(-) PL 127.3	(+) PL 127.3	(-) PL 88.5	(+) PL 127.3			

Call	Name																
KC0YNS	Corey																0
KD0FAR	Bill																0
KD0ITM	Robert																0
KF5KI	John	1	1	1	1		1		1	1	1	5	5				0.8
KC0LYA	Dave	1	1	1	2	1	?	1	1	2	3	5	5				1.3
K0ATS	Jerry	1	1	1	1	2	4	1	1	1	3.00	5	5				1.6
KE0IKE	Rick @ Cooper EOC	1	1	1	1	1	4	1	2	1	2	5	5				1.5
KM0MVR	Mike	1	1	X	1	1	4	X	1	1	5	5	5				1.5
N0AXZ	Bill	1	1	1	2	2	4	1		3	4	5	5				1.9
KE0FPP	Don	1	1	1	1	2	4	1	1	1	5	5	5				1.8
N0OFJ		1	1	1	1	1	4	1	1	5	2	5	5				1.8
AD0FX	John @ Howard EOC	3	1	1	1	1	4	1	1	1	5	5	5				1.9
W9TIG	Gary	1	1		1	1	4		1	5	5	5	5				1.9
W0TES	Tim	1	1	1	1	2	4	1	1	3	5	5	5				2
KE0DHO	Bernard	1	2	2	2	1	4	1	1	5	2	5	5				2.1
AB0SE	Wes	1	1	5	1	1	4	5	1	2	2	5	5				2.3
AD0UK	Brian	2	1	1	1	5	4	1	1	5	2	5	5				2.3
KE0IKF	Eric	2	2	5	1	5	4	1	1	2	5	5	5				2.8
KD0GOL		2	5	5	2	1	4	5	1		4	5	5				2.9
KD0DAZ	Kris	2	2	2	4	5	4	1	3	5	4	5	5				3.2
KV0S	Dave	1	1	1	1	5	4	5	5	5	5	5	5				3.3
WH6EB	Peter	1	1	5	5	2	4	5	1	5	5	5	5				3.4
KD0BVQ	Hank	2	2	5	1	3	4	5	5	5	5	5	5				3.7
AC0MP	Richard	1	1	5	4	5	4	5	5	5	5	5	5				4
		1.33	1.38	2.14	1.67	2.24	3.67	2.00	1.67	3.00	3.76	5.00	5.00				

WD6BGN	Ralph	1	1	1	1	1	4	1	1	1	3	5	5				1.5
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N0AXZ 1.24.17

Repeater Run from Columbia BCARES sites

		1 - Full Quieting		2 - Some Noise Good Copy		3 - Noisy copiable		4 - Too Noisy to Copy		0 - NO Copy		BCARES		WINLINK		
KE0FPP		K0SI 146.76 (-) PL 127.3	K4CHS 146.61 (-) PL 127.3	COL-Int-tie 444.425 (+) PL 77.0	Boonville e 147.36 (+)	Fulton 147.31 (+)	Linn KM0HP 145.39 (-) PL 127.3	Ashland 444.175 (+) PL 107.2	Mexico 147.25 (+)	Moberly 147.09 (+)	JC 147.00 (-) PL 127.3	St Mary's 442.15 (+) PL 127.3	Rolla 146.790 (-) PL 88.5	KC0YNS/P 442.125 (+) PL 127.3	WX0BC D- Star 442.325	145.03 & 144.970
Call	Name															
KC0YNS	Corey															0
KD0ITM	Robert															0
KD0FAR	Bill															0
KE0FPP	Don															0
KC0LYA	Dave	1	1	1	2	1	1	1	1	2	1					1.2
KE0IKE	Rick	2	1	1	2	2	2	1	2	2	2					1.7
KF5KI	John	1	1	1	1	1	3	1	1	2	5					1.7
K0ATS	Jerry	1	1	2	1	3	5	1	1	1	2					1.8
N0AXZ	Bill	1	1	2	1	1	2	1	1	3	5					1.8
AB0SE	Wes	1	1	5	1	1	1	5	1	2	1					1.9
WD6BGN	Ralph	1	1	1	1	2	5	1	1	5					1.9	
W0TES	Tim	1	1	1	1	2	2	1	2	5	5					2.1
N0OFJ	John	1	1	1	1	2	5	1	1	3	5					2.1
KE0DHO	Bernard	5	2	2	2	2	1	1	1	5	2					2.3
KM0MVR	Mike	1	1	5	1	1	3	5	1	1	5					2.4
AD0FX	John	3	3	2	2	5	5	1	1	2	5					2.9
AD0UK	Brian	2	2	1	2	5	5	1	1	5	5					2.9
KE0IKF		2	1	5	1	5	5	1	1	3	5					2.9
KD0GOL		3	5	5	2	1	2	5	1	5	1					3
W9TIG	Gary	1	1	5	1	2	5	5	1	5	5					3.1
KV0S	Dave	1	1	2	1	5	5	5	5	5	5					3.5
KD0BVQ	Hank	2	2	5	1	3	5	5	3	5	5					3.6
KD0DAZ	Kris	2	2	5	4	5	5	1	2	5	5					3.6
WH6EB	Peter	1	1	5	5	2	5	5	3	5	5					3.7
AC0MP	Richard	2	2	5	3	5	5	5	5	5	5					4.2
		1.67	1.52	2.95	1.71	2.67	3.67	2.52	1.71	3.43	4.00					

N0AXZ 1.24.17

**Repeater Run from Columbia BCARES sites**

1 - Full Quieting      2 - Some Noise Good Copy      3 - Noisy copiable      4 - Too Noisy to Copy      0 - N0 Copy

NOOFJ	K0SI		K4CHS		COL-Int-tie		Boonville		Fulton		Linn		KD0SAF		Mexico		Moberly		JC		St Mary's		Rolla		BCARES		WX0BC		WINLINK			
	146.76	146.61	444.425	147.36	147.315	145.39	444.175	147.255	147.090	147.00	442.15	146.790	442.125	442.325	145.03 &	144.970																
	(-)	(-)	PL	(+)	(+)	(+)	(-)	(+)	(+)	(-)	(+)	(-)	(+)	(-)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)		
	PL 127.3	127.3	PL 77.0				PL 127.3	PL 107.2				PL 127.3	PL 127.3	PL 88.5	PL 127.3																	
Call	Name																															
KC0YNS	Corey																															
KD0FAR	Bill																															
KD0ITM	Robert																															
KC0LYA	Dave		1	2	2	2	3	5	1	2	3	3	5	5																	0	
KE0FPP	Don		1	1	2	1	3	5	1	2	3	5	5	5																	0	
KF5KI	John		1	1	2	1	3	5	1	2	3	5	5	5																	0	
N0AXZ	Bill		1	1	3	1	3	5	1	2	3	4	5	5																	2.4	
K0ATS	Jerry		1	1	3	1	3	5	1	2	3	5	5	5																	2.4	
KE0IKE	Rick		1	1	3	2	3	5	2	2	3	3.5	5	5																	2.4	
KD0BVQ	Hank		2	2		2	3	5		2	5	5	5	5																	2.5	
W0TES	Tim		1	1	2	1	3	5	1	2	5	5	5	5																	2.55	
WD6BGN	Ralph		2	1	5	1	3	5	1	2	3	5	5	5																	2.6	
AB0SE	Wes		1	2	5	1	3	5	5	2	3	3.5	5	5																	2.6	
AD0UK	Brian		2	1	2	2	5	5	1	2	5	5	5	5																	2.8	
KM0MVR	Mike		1	1	5	1	3	5	5	2	3	5	5	5																	3	
ke0ikf			2	2	5	1	5	5	1	2	3.5	5	5	5																	3	
KD0DAZ	Kris		2	2	2	4	5	5	1	2	5	5	5	5																	3.1	
W9TIG	Gary		1	1	5	1	3	5	5	2	5	5	5	5																	3.1	
AD0FX	John		3	1	3	2	5	5	5	2	3	5	5	5																	3.15	
KE0DHO	Bernard		5	5	3	2	3	5	1	2	5	4	5	5																		3.3
KV0S	Dave		1	1	2	1	5	5	5	5	5	5	5	5																	3.3	
WH6EB	Peter		1	1	5	5	3	5	5	2	5	5	5	5																	3.3	
kd0gol	Matt		2	5	5	2	3	5	5	2	5	3.5	5	5																	3.4	
AC0MP	Richard		2	2	5	4	5	5	5	5	5	5	5	5																	3.4	
			1.62	1.67	3.29	1.81	3.57	5.00	2.52	2.29	3.98	4.60	5.00	5.00																	3.5	
N0OFJ	Jon		1	1	2	1	3	5	2	2	3.5	3.5	5	5																	3.5	

Notes: Boonville machine was noisy on everyone for the first minute or two and then cleared up  
 Ashland signal strength varied s1 to s7  
 No contact with 147.00 or 442.15 or 146.79

Repeater Run from Columbia BCARES sites

		1 - Full Quieting		2 - Some Noise Good Copy			3 - Noisy copiable			4 - Too Noisy to Copy			0 - N0 Copy		BCARES	WX0BC	WINLINK
		K0SI	K4CHS	COL-Int-tie	Boonville	Fulton	Linn KM0HP	Ashland	Mexico	Moberly	JC	St Mary's	Rolla	KC0YNS/P	D-Star	145.03 &	
KF5KI		146.76	146.61	444.425	147.36	147.315	145.39	444.175	147.255	147.090	147.00	442.15	146.790	442.125	442.325	144.970	
		(-) PL 127.3	(-) PL 127.3	(+) PL 77.0	(+)	(+)	(-) PL 127.3	(+) PL 107.2	(+)	(+)	(-) PL 127.3	(+) PL 127.3	(-) PL 88.5	(+) PL 127.3			
Call	Name																ON 9 RPTRS
KC0YNS	Corey																0.00
KD0FAR	Bill																0.00
KD0ITM	Robert																0.00
KF5KI	John																0.00
KE0FPP	Don	1	1	1	1	1	3	1	1	1	5	5	5				1.22
KC0LYA	Dave	1	2	1	2	1	2	1	1	2	1	5	5				1.44
KE0IKE	Rick	1	1	1	1	2	2	1	2	2	1	5	5				1.44
WD6BGN	Ralph	1	1	1	1	1	5	1	1	1	5	5	5				1.44
N0AXZ	Bill	1	1	1	1	2	3	1	1	3	4	5	5				1.56
W0TES	Tim	1	1	1	1	1	2	1	1	5	5	5	5				1.56
N0OFJ	Jon	1	1	1	1	1	5	1	1	3	5	5	5				1.67
K0ATS	Jerry	1	1	2	1	3	5	1	1	1	1	5	5				1.78
KE5IKF	Eric	2	2	5	1	5	5	1	1	3	5	5	5				2.56
AB0SE	Wes	1	1	5	1	1	2	5	1	1	1	5	5				2.00
KM0MVR	Mike	1	1	5	1	1	3	5	1	1	5	5	5				2.11
AD0FX	John	3	1	1	2	5	5	1	1	1	5	5	5				2.22
KE0DHO	Bernard	2	2	2	2	2	3	1	1	5	1	5	5				2.22
AD0UK	Brian	2	1	1	2	5	5	1	1	5	5	5	5				2.56
KD0DAZ	Kris	2	2	1	4	5	5	1	2	5	5	5	5				3.00
KV0S	Dave	1	1	1	1	5	5	5	5	5	5	5	5				3.22
KD0GOL	Matt	2	5	5	2	1	3	5	1	5	1	5	5				3.22
W9TIG	Gary	1	1	5	1	2	5	5	5	5	5	5	5				3.33
KD0BVQ	Hank	2	3	5	2	3	5	5	3	5	5	5	5				3.67
WH6EB	Peter	1	1	5	5	3	5	5	3	5	5	5	5				3.67
AC0MP	Richard	2	2	5	4	5	5	5	5	5	5	5	5				4.22
		1.43	1.52	2.62	1.76	2.62	3.95	2.52	1.86	3.29	3.81	5.00	5.00				



