

**WD2XSH status report: March 1 - May 31, 2007****Prepared by Fritz Raab, W1FR, Experiment Coordinator****May 30, 2007****1. ADMINISTRATIVE ISSUES**

A total of 16 stations have gotten on the air. One is temporarily off the air pending resolution of antenna problems. One has decided to drop-out. Two moved away from the location specified in the license. Three are working on their equipment. One is expected to be on the air very soon.

Processing of the logs is now working smoothly. One participant remains under a QRT notice because he has yet to submit a log. The web site is also working smoothly..

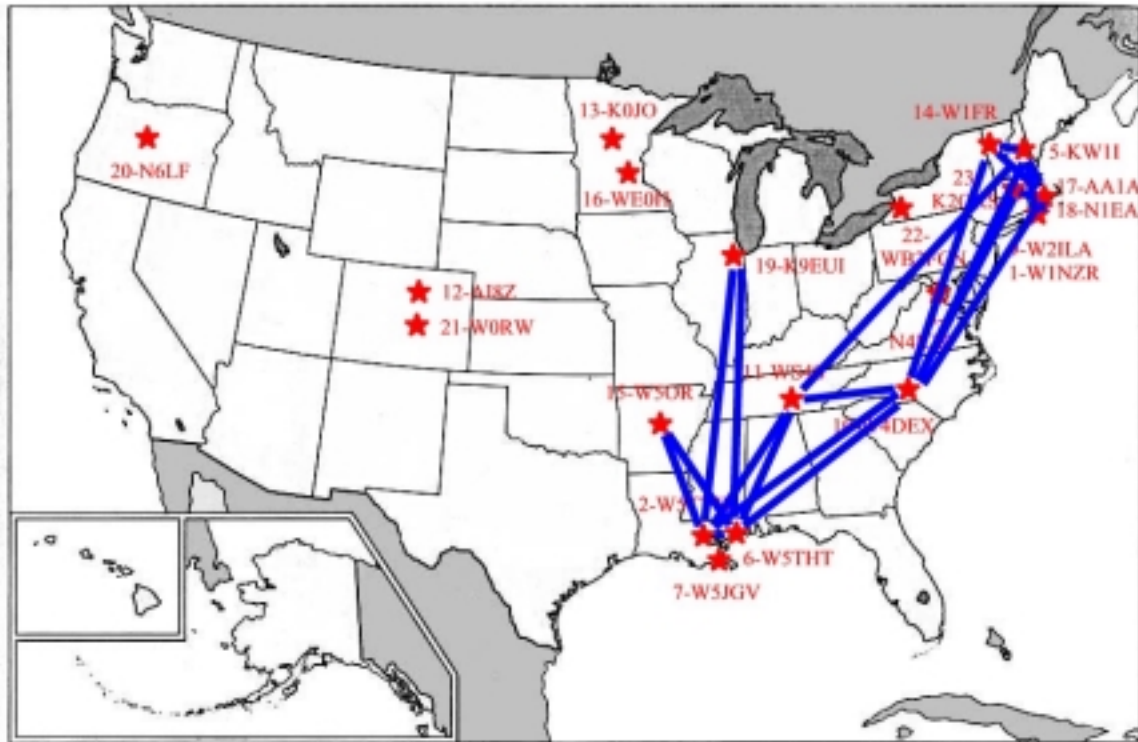
**2. COMMUNICATIONS**

During the past three months, the WD2XSH stations have added 2413 hours of operation, bringing the total to 7042. A total of 83 QSOs have now been made. Over 3650 reception reports have been filed on our web site.

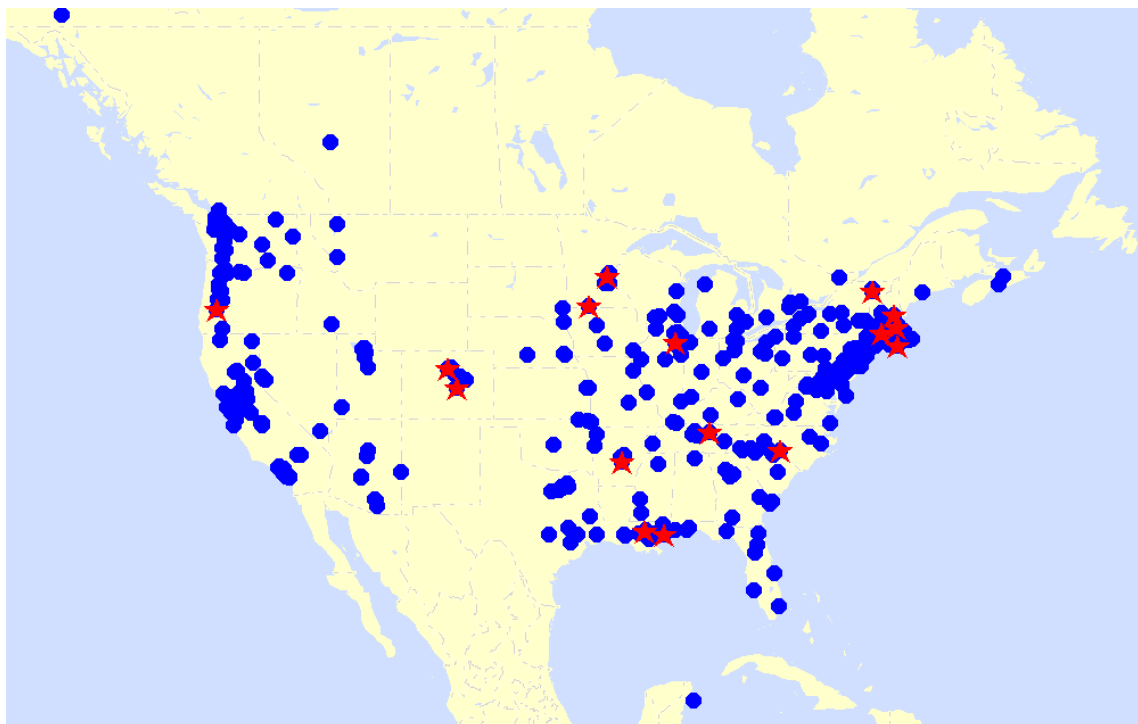
The QRN has increased significantly with the approach of summer, and operations have decreased somewhat during May. Nonetheless, several stations continue to be received at distances of 1000 mi or more.

Operating statistics are given in Appendix A on a station-by-station basis. Maps of the QSOs (from logs) and reception reports (from web site) appear below. Appendix B presents maps of the reception reports. The longest distance over which a QSO has been maintained remains 884 mi from New Hampshire to Tennessee.

A few additional ground-wave QSOs have been made from MS to LA, further verifying the capability of this band to support ionospheric-independent regional communication.



Map of WD2XSH QSOs as of April 30, 2007.



Map of WD2XSH reception reports as of April 30, 2007.

### 3. INTERFERENCE

There have been no reports of interference, however, we are investigating two potential interference problems.

#### NDB OF

No new measurements of the relative signal levels of NDB OF and the WD2XSH stations have been made. We hope to undertake a more extensive set of measurements in the fall when the QRN is lower. We have obtained the FAA technical order that is used to evaluate potential interference from one NDB to another, and will apply it to our stations.

#### NEED

NEED was on the air for three days in May, but has otherwise been silent. We have recruited several more monitoring stations in Virginia, but none has direction-finding capability. Bearings taken by the same stations suggest a location slightly north of Norfolk, but do not converge as well as the previous bearings.

### 4. INTERNATIONAL AND OTHER

SM6BHZ and the two German stations have continued operation, and several UK stations are now on the air. K2ORS and three other New England experimenters have applied for a license for 505 - 515 kHz to conduct experiments with a variety of different modulation modes. Experimental station WD2XFX has asked for 505 - 510 kHz to be added to his 136-kHz license.

### 5. PLANS

Four efforts are planned for this summer.

First, we are going to try ground-wave tests in several locations (New England, MS-LA, and MN). Since noise levels are highest in the summer, if we can communicate by ground wave in the summer, we can communicate at any time.

Second, we plan to initiate the use of PSK/FSK/MSK-31. Since these signals fit within the spectrum of the currently authorized CW signal, we should be able to use these digital modes by simply filing notice under Section 5.77 of the FCC rules.

Third, I plan to begin consideration of substitutes and additions. At present, over two dozen amateurs have submitted information forms with the hope of being added to the license. Criteria of interest include (a) expansion of geographic coverage, (b) expansion of ground-wave tests, (c) capability of using narrow-band digital modes, and (d) on-going service to the

experiment. New additions will be expected to be on the air within three months of modification of our license by the FCC.

Fourth, I plan to investigate having QSL cards printed.

### APPENDIX. STATISTICS

STATION	CALL	STATUS	HOURS	QSOs	COMMENT
WD2XSH/1	W1NZR	QRT	?	3?	QRT until log submitted
WD2XSH/2	W5TVW	ON	12:14	21	
WD2XSH/3	WD5CVG	DROPPED	-	-	
WD2XSH/4	WD4PLI	DROPPED	-	-	
WD2XSH/5	KW1I	ON	17:21	34	
WD2XSH/6	W5THT	ON	1110:49	33	
WD2XSH/7	W5JGV	MOVED	-	-	
WD2XSH/8	N4ICK	WORKING	-	-	Seeking location for ant
WD2XSH/9	W2ILA	ON	7:41	20	
WD2XSH/10	W4DEX	ON	488:16	17	
WD2XSH/11	WS4S	ON	761.28	11	
WD2XSH/12	AI8Z	ON	609:22	0	
WD2XSH/13	K0J0	ON	460.22	0	
WD2XSH/14	W1FR	ON	17:09	3	Antenna problem
WD2XSH/15	W50R	ON	602:19	0	Antenna repair
WD2XSH/16	WE0H	WORKING	-	-	Working on equipment
WD2XSH/17	AA1A	ON	364:44	23	
WD2XSH/18	N1EA	WORKING	-	-	Working on equipment
WD2XSH/19	K9EUI	ON	1037:38	2	
WD2XSH/20	N6LF	ON	1531:26	0	
WD2XSH/21	WORW	DROPPED	652:42	0	
WD2XSH/22	WB2FCN	MOVED	-	-	Ready to get on air
WD2XSH/23	K2ORS	ON	97:36	0?	QSOs not shown in log
TOTAL		14 ON	7041	83	

**Note:**

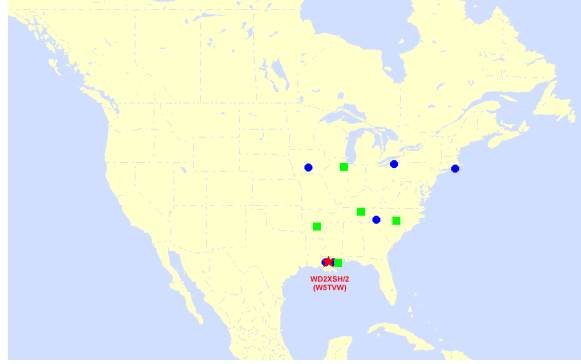
Operating hours and QSOs are derived from logs through April 30, 2007.

### APPENDIX B. MAPS

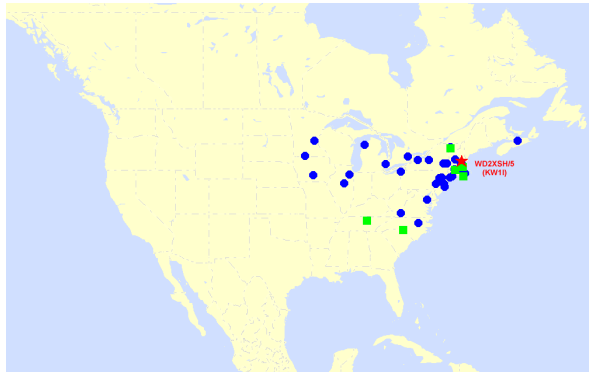
These maps were compiled by Ralph Walio W0RPK using reception reports from the web-site data base and QSOs from the official logs.



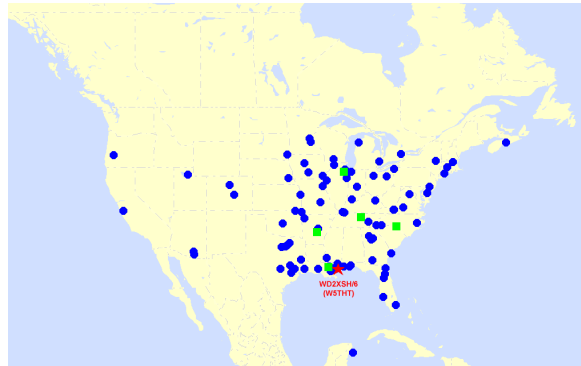
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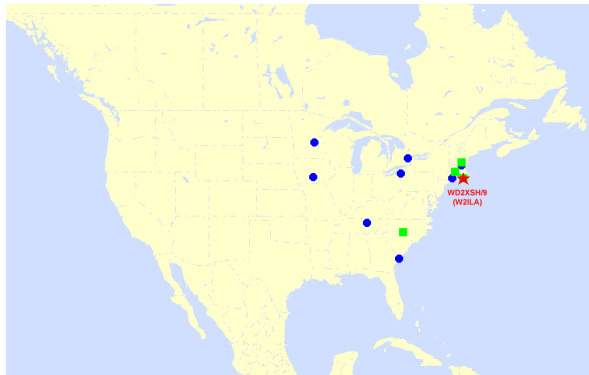
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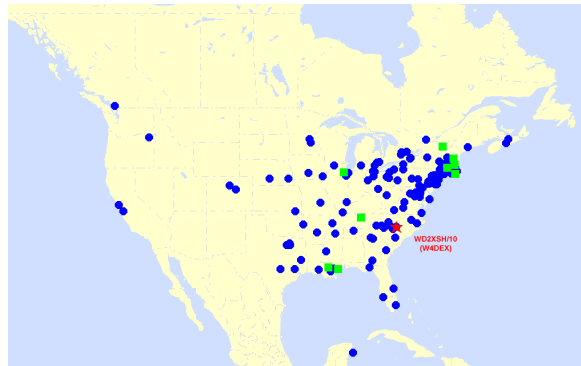
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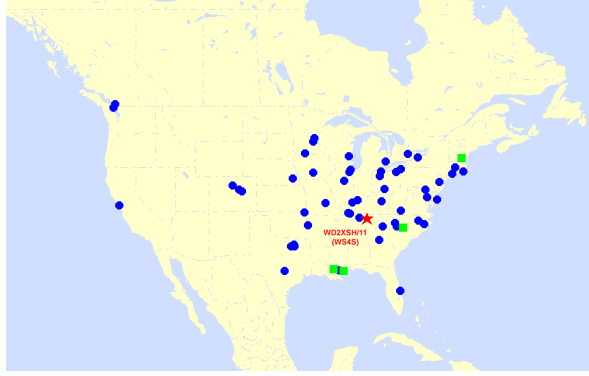
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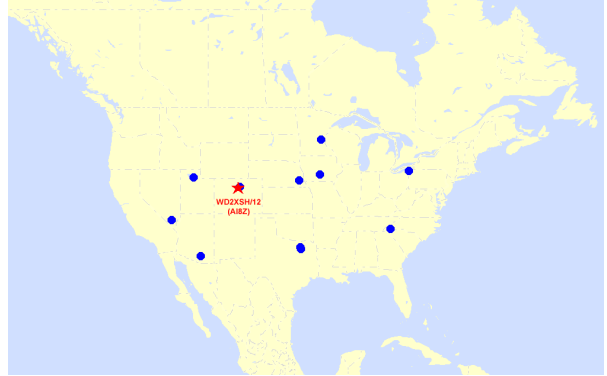
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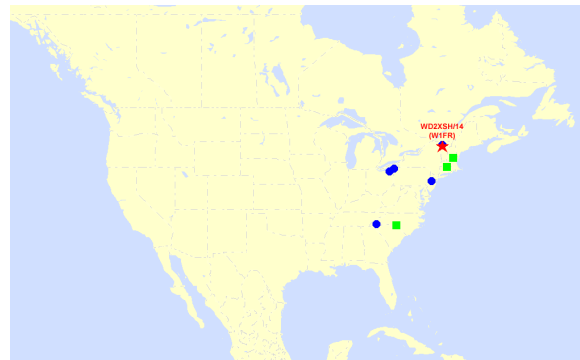
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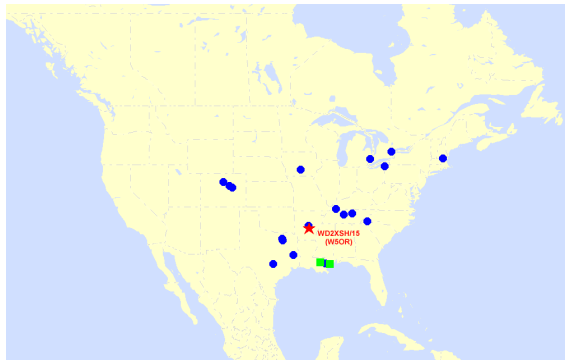
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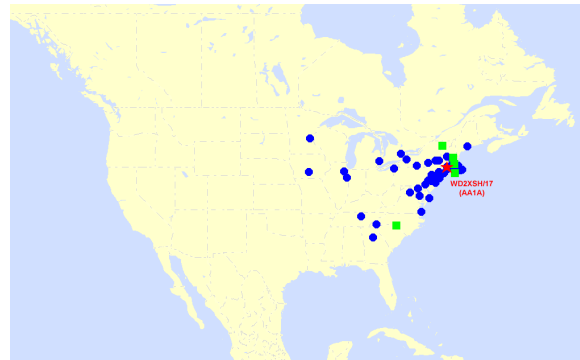
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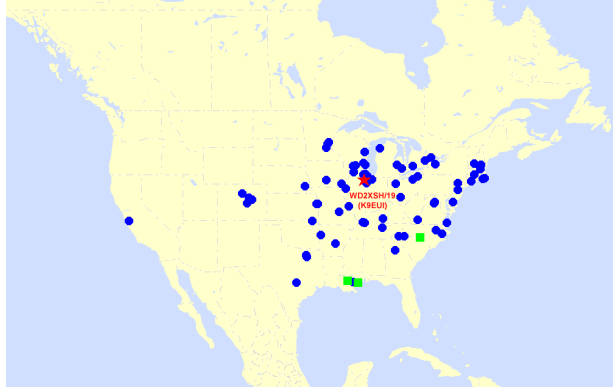
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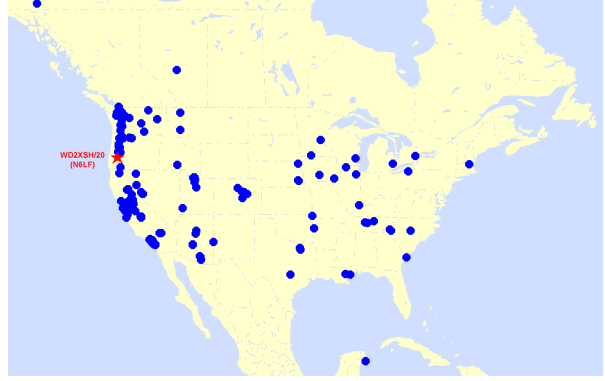
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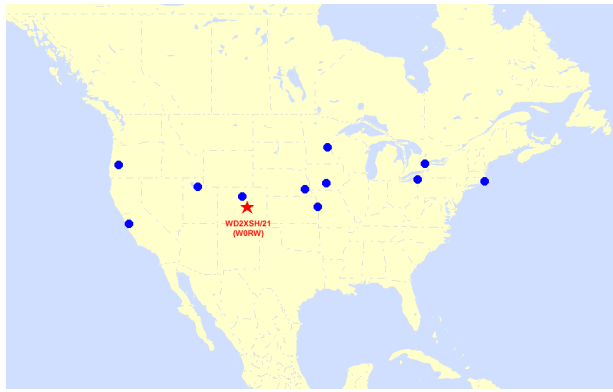
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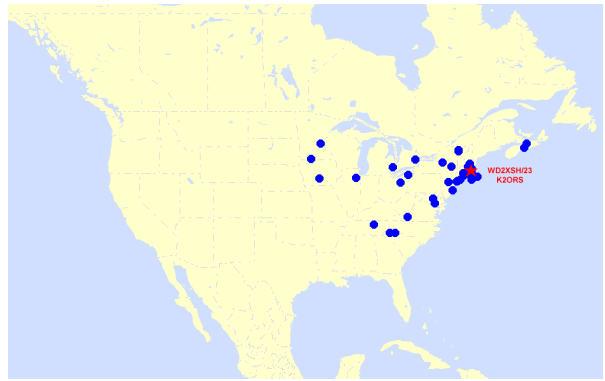
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