WD2XSH status report: March 1 - May 31, 2012

Prepared by Fritz Raab, W1FR, Experiment Coordinator

July 8, 2012

1. SUMMARY OF OPERATIONS

This report provides a summary of WD2XSH activity during the Winter 2011 - 2012. The key statistics of our operations during this period are:

- Number of QSOs: 2 additional, total 492;
- Number of reports via web site: 483 additional, total 14,949;
- Operating hours: 7,571 additional, total 129,081; and
- Number of interference complaints: 0.

All statistics are based upon the end of the reporting period (05/31/12). Only transmitting hours are included.

2. ADMINISTRATIVE

Nothing has been done on the recommendations modification to the WD2XSH license. However, ARRL attorney Chris Imlay has assured the author that the mod is working its way to the top of the queue.

3. COMMUNICATIONS

I have authorized Eric Tichansky NO3M to operate as a "mobile" of station /28. His QTH in Saegertown, PA is well within the permitted 50-km radius from the fixed site of /28 in Kellogville, OH QTH. Operation is coordinated between KN8AZN and NO3M so that both are not on the air at the same time. NO3M uses the designator /46.

Many WD2XSH stations participated in a special event on April 14 and 15 to mark the 100th anniversary of the sinking of the *Titanic* and the role radio played in the rescue. VX9MRC and several WE2XGR stations were also participating. Heritage stations WNE and NVYC were active on 472 and 512 kHz, respectively. On the other side of the pond, GB100MGY made special transmissions.

WF9XIH, WE2XGR/6 WE2XGR/3 made simulated spark-gap transmissions. Signals from a spark-gap transmitter were either recorded or detected on an AM radio and then remodulated onto a carrier to ensure a clean signal.

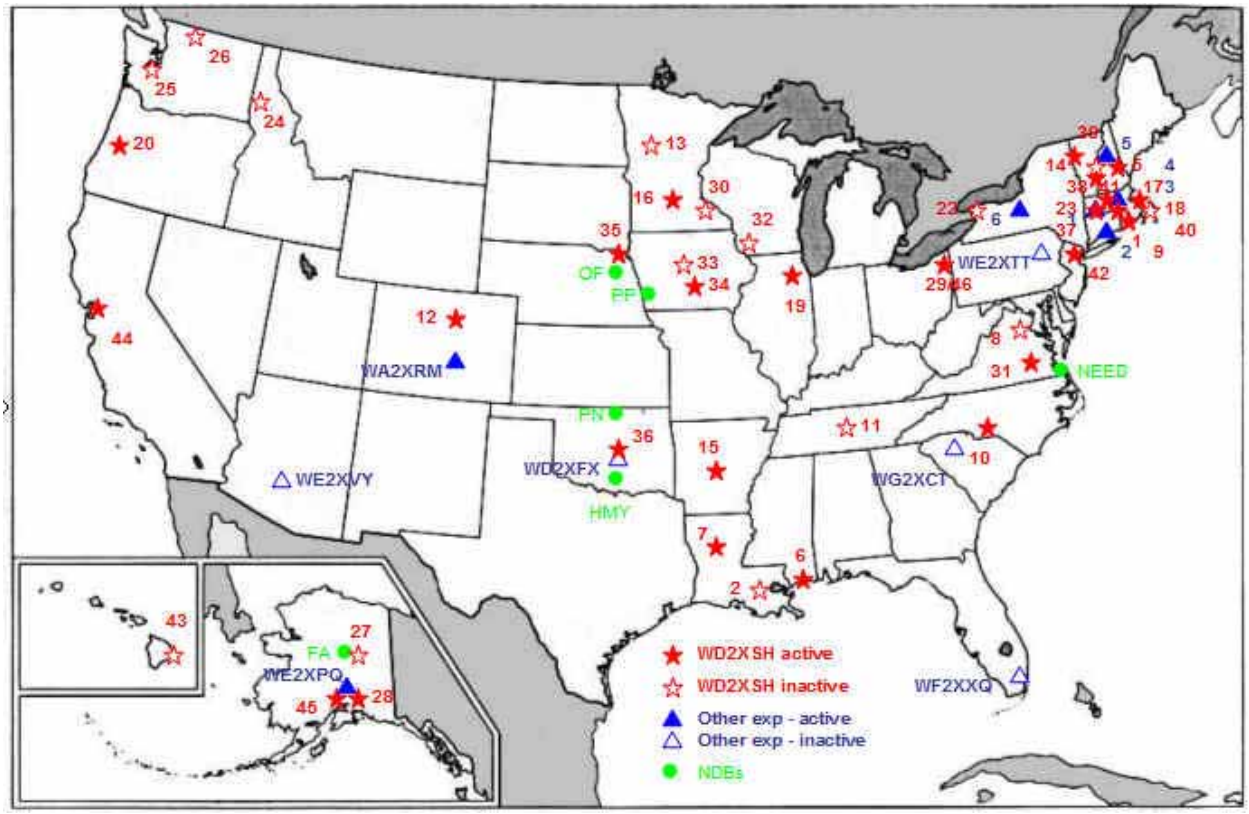

Figure 1. Locations and status of US 500-kHz experimental stations.

4. ACTIVITIES

Bill Ashlock passed away on March 10. Bill was a well-known "lowfer" WM and also operated on 600 meters as WE2XGR/5. He was best known for his work with loop transmitting antennas at LF and MF. Bill demonstrated that loop antennas could be deployed in heavily wooded areas without suffering the losses of a vertical antenna in the same environment.

Eric Nichols KL7AJ - WD2XAH/27 received *QST*'s "Cover Plaque" award for his article in the March issue "Three wrong assumptions about the ionosphere."

Mike Shaw K2LRE - WD2XSH/42 has been looking into the possibility of transmitting from the Lightship *Ambrose*. The Veteran Wireless Operators Association is involved in preservation of the *Ambrose*, which is docked in the seaport in New York City. Mike has been able to drive 2.5 A of RF into the bird-cage antenna. He plans to continue work during the summer. Some photos of the *Ambrose*, its antenna, and its radio room follow.

Photos of the Ambrose (coutesy Mike Shaw).

5. INTERFERENCE

There have been no reports of interference, however, we are continuing to monitor three potential interference problems:

- NDB OF continues to operate on 510 kHz.
- We continue to hear NEED on 505 kHz from time to time.
- NDB FA continues to operate on 510 kHz.

The location of NEED has been determined to be Ft. Eustis, VA.

Ursanav is currently transmitting on 100 kHz from the Coast Guard Loran facility at Wildwood, NJ. Other potential test sites include Boston, MA; Chambersburg, PA; Leesburg, VA; Chesapeake, VA; and Charleston, SC (per *Inside GNSS*, March/April 2012).

The HADGPS Station in Pueblo, CO, is back on the air. It his reported to have a 900- z tone with a 275-ms sync pulse.

6. OTHER US EXPERIMENTAL LICENSES

The frequency bands of US and foreign amateur and experimental licenses are shown in Figure 2. The parameters of U.S. experimental licenses are given in Appendix B, and the known unlicensed (part-15) operators are given in Appendix E.

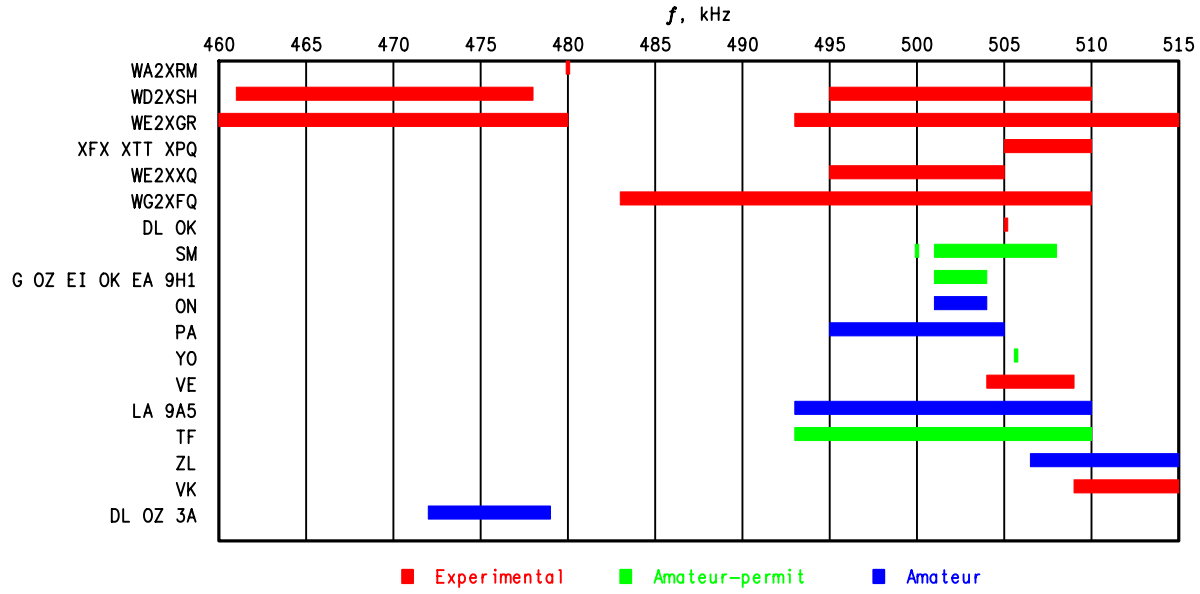

Figure 4. Worldwide amateur activity near 500 kHz.

Brian Justin applied on 04/21 for a new experimental license to replace his current STA WF2XIH. The frequency range is 483 to 510 kHz and the modes are CW and AM. It has been assigned the callsign WG2XFQ, was granted on June 8, and runs through June 1, 2014.

On June 21, Warren Ziegler applied for an extension of the WE2XGR license through April, 2015.

7. INTERNATIONAL AMATEUR ACTIVITIES

Nothing to report.

8. HERITAGE (MUSEUM) OPERATIONS

The MRHS is again planning a "Night of Nights" on July 12 to commemorate the last commercial CW transmission.

Appendix D identifies the known heritage stations in the USA.

9. REGULATORY

Three countries have already allocated a new amateur 630-meter band.

The Danish regulator ERST has announced the availability for Radio Amateurs 472 to 479 kHz effective Jan. 1, 2013.

The German administration (BNetzA) announced that effective June 13 German radio amateurs with a licence class A may use the band 472 to 479 kHz. Frequency Allocation Table). The power limit is 1 W ERP and the maximum bandwidth is 800 Hz.

The "Direction des Communications Electroniques" of the Principality of Monaco the segment 472 to 479 kHz to the amateur service with secondary status, with a maximum of 1 W ERP.

10. PLANS

We expect that operations will decrease during the summer months, as usual. Nonetheless, several determined operators continue to be on the air.

APPENDIX A. WD2XSH STATISTICS

STATION	CALL	STATUS	02/29/12		05/31/12		
			HOURS	QSOs	HOURS	QSOs	LAST LOG
WD2XSH/1	W1NZR	Inactive	4	3	4	3	11/11
WD2XSH/2	W5TVW	Inactive	13	22	13	22	08/07
WD2XSH/5	KW1I	ON	53	55	63	57	04/12
WD2XSH/6	W5THT	ON	9671	180	9932	180	05/12
WD2XSH/7	W5JGV	ON	16374	1	18580	1	05/12

WD2XSH/8	N4ICK	Inactive	0	0	0	0	-
WD2XSH/9	W2ILA	Inactive	10	27	10	24	05/10
WD2XSH/10	W4DEX	ON	1947	30	2029	30	05/12
WD2XSH/11	WS4S	Inactive	810	12	810	12	11/10
WD2XSH/12	AI8Z	ON	29542	25	31008	25	05/12
WD2XSH/13	K0JO	SK	997	7	997	7	08/08
WD2XSH/14	W1FR	ON	508	10	517	10	04/12
WD2XSH/15	W5OR	OFF	10785	2	14140	2	05/12
WD2XSH/16	WE0H	Inactive	1186	16	1186	16	05/12
WD2XSH/17	AA1A	ON	11802	23	11802	31	03/12
WD2XSH/18	N1EA	Inactive	3959	0	3959	0	04/08
WD2XSH/19	K9EUI	Inactive	1339	3	1351	3	02/12
WD2XSH/20	N6LF	ON	2402	7	2402	7	05/12
WD2XSH/21	W0RW	Dropped	652	0	652	0	02/11
WD2XSH/22	WB2FCN	Inactive	-	-	-	-	-
WD2XSH/23	K2ORS	Inactive	112	1	112	1	08/09
WD2XSH/28	KL7Q	ON	59	6	63	6	05/12
WD2XSH/29	KN8AZN	ON	480	5	493	5	05/12
WD2XSH/31	WA1ZMS	ON	16760	8	18660	8	05/12
WD2XSH/34	W0RPK	OFF (Moved)	153	1	153	1	04/11
WD2XSH/35	K0HW	Inactive	11	0	11	1	02/12
WD2XSH/36	W5GHZ	Inactive	1180	0	1180	0	08/10
WD2XSH/37	W1XP	ON	6493	7	6493	16	05/12
WD2XSH/38	KN1H	ON	2048	2	2052	2	05/12
WD2XSH/41	W1HK	ON	15	13	18	13	04/12
WD2XSH/42	K2LRE	ON	18	0	54	0	05/12
WD2XSH/44	AC6QV	ON	100	0	72	0	05/12
WD2XSH/45	KL7UW	ON	173	6	175	6	05/12
WD2XSH/46	NO3M	ON	-	-	45	0	05/12

TOTAL 05/31/11	19 ON	99,408	450
TOTAL 08/31/11	19 ON	106,158	451
TOTAL 11/30/11	16 ON	114,172	451
TOTAL 02/29/12	13 ON	121,743	490
TOTAL 05/31/12	18 ON	129,081	492

Notes:
Operating hours and QSOs are derived from logs through February 29, 2012. The statistics in this appendix were compiled by Ralph Wallio W0RPK using the Excel logs submitted by the stations. Decreases in the number of operating hours or QSOs from the previous total indicate correction of errors. Several stations are off the air because of health or equipment problems. "ON" means operation within the past year. Stations who do not submit logs each month are subject to an automatic QRT order and must remain off the air until their log has been brought up to date.

APPENDIX B. US EXPERIMENTAL LICENSES

CALL	NUMBER	QTH	f, kHz	ERP, W	DATES	NOTES
WA2XRM	1	CO	480	100	01/01/09 - 01/01/14	
WD2XSH	43	USA	495 - 510	20	09/13/06 - 08/01/15	
			461 - 478			
WE2XGR	8	New England	493 - 515	1000	09/05/07 - 09/01/12	
			460 - 480			
WE2XFX	1	OK	505 - 510	20	07/27/07 - 07/26/12	
WE2XTT	1	PA	505 - 510	1500*	09/08/08 - 09/01/13	
WE2XPQ	1	AK	505 - 510	50	06/05/08 - 06/01/13	
WE2XVY	1	AZ	500 - 510	200	12/09/08 - 12/01/10	SK
WF2XAU	1	FL	505 - 510	10	06/23/09 - 01/01/10	Exp.
WF2XXQ	1	FL	495 - 505	500	10/14/11 - 10/01/16	
WG2XCT	1	SC	495 - 510	5	03/14/12 - 03/01/14	
WG2XGQ	1	VA	470 - 510	20	06/08/12 - 06/01/14	

* RF output to antenna

APPENDIX C. FOREIGN AMATEUR/EXPERIMENTAL BANDS

COUNTRY	TYPE	BAND, kHz	ERP, W	
Sweden	NoV	500, 501 - 508	20	CW, SSB, data
Germany	Exp	505.0 - 505.2	9	
Czech Republic	Exp	501-504, 505.60	10	
UK	NoV	501 - 504	10	
Belgium	Amateur	501 - 504	5	
Canada	Exp	504 - 509	20	
Norway	Am/Herit	493 - 510	100	(RF) CW only
Romania	NoV	505.68	100	(RF)
Denmark	NoV	501 - 504	20	
Ireland	NoV	501 - 504	10	CW, PSK-31
Netherlands	Amateur	495 - 505	5	
Iceland	NoV	493 - 510	100	CW
New Zealand	Amateur	505 - 515	20	200 Hz
Croatia	Exp	493 - 510		
Australia	Exp	505 - 515		
Spain	NoV	501 - 504	5	100 Hz
Malta 9H1	Amateur	501 - 504	10	
Italy	NoV	501	One station	
Denmark	Amateur	472 - 479		
Germany	Amateur	472 - 479		

Monaco	Amateur	472 - 479

APPENDIX D. HERITAGE STATIONS

CATEGORY	CALLSIGN	FREQUENCIES	OPERATOR / QTH
Coastal	KSM	500, 426	MRHS, Bolinas, CA
	KFS		
	KPH	500, 426	MRHS, Bolinas, CA
	KLB	500, 488	Seattle, WA
	WLO	500, 438	Mobile, AL
New	WNE	500, 472	NEHRS, Stoneham, MA
	KDR	500, 482	Bellevue, WA
	WFT	500, 486	KZ4RV, Palmeto, FL
USCG	NMC	500, 448, 472	Bolinas, CA
	NMN	500, 448, 468	Chesapeake, VA
	NOJ	500, 416, 470	Kodiak, AK
Ships	KKUI		SS American Victory
	KYVM		SS Red Oak Victory
	KECW		SS Lane Victory
	KXCH		SS Jeremiah O'Brien
	KHRC		SS Matsonia
	NWVC	500, 512	LST325, Evansville, IN
	NTTH	500, 512	USS Cassin Young, Charleston,MA
	NEPL		USS Massachusetts,Fall River,MA
	NWKJ		USS Yorktown, Charleston, SC
Foreign	LGQ	493 - 510	Rogaland, Norway
	LM500LGN	493 - 510	Bergen, Norway

APPENDIX E. US PART-15 OPERATORS

f, kHz	ID	QTH	OPERATOR
510.1	HI	Monroe, CT	
510.903	EH	East Haven, CT	K1RGO
515.15	U	Magdalena, NM	Mike Mideke

APPENDIX F. CANADIAN 500-kHz STATIONS

CALL	OP	QTH	STATUS
VX9BDQ	VE7BDQ	Delta, BC (near Vancouver)	Active
VX9MRC	VO1NA	Torbay, NFLD	Active
VX9ZZZ	VE1ZZ	Nova Scotia	Active
VX9OHH	VE3OHH	Richmond Hill, Ontario	Inactive

APPENDIX G. COMMUNICATION RECORDS

The reception and QSO distances (in miles) below have been compiled by Ralph Walio WØRPK.

STATION	CW	QRSS	DIGIT	AUTO*	SSB	QSO
WD2XSH/1	56	--	--	--	--	56
WD2XSH/2	778	--	--	--	--	775
WD2XSH/5	1,508	1,508	--	--	--	1,315
WD2XSH/6	3,434	6,679	--	--	--	2,079
WD2XSH/7	3,212	8,903	1,951	4,866	--	266
WD2XSH/9	1,155	--	--	--	--	649
WD2XSH/10	3,767	4,369	701	5,305	--	747
WD2XSH/11	1,039	4,515	--	--	--	884
WD2XSH/12	1,811	1,811	1,306	2,357	--	1,696
WD2XSH/14	1,467	1,467	--	--	--	747
WD2XSH/15	930	1,432	--	1,420	--	377
WD2XSH/16	1,535	854	1,074	718	--	1,089
WD2XSH/17	3,668	4,032	--	4,611	--	1,308
WD2XSH/18	3	--	--	--	--	--
WD2XSH/19	1,814	465	392	--	--	782
WD2XSH/20	4,737	--	--	--	--	2,301
WD2XSH/23	1,185	--	--	--	--	690
WD2XSH/28	91	--	--	--	--	91
WD2XSH/29	687	1,048	669	1,090	--	669
WD2XSH/31	2,057	3,348	--	--	--	751
WD2XSH/34	1,060	--	669	273	--	669
WD2XSH/35	1,321	--	--	--	--	1,209
WD2XSH/36	--	--	--	--	--	--
WD2XSH/37	1,098	--	--	3,489	--	467
WD2XSH/38	1,468	1,468	--	524	--	238
WD2XSH/41	14	--	--	--	--	14
WD2XSH/42	731	--	--	--	--	357
WD2XSH/44	1,448	--	--	--	--	--
WD2XSH/45	96	--	--	2,893	--	91
WD2XSH/46	1,396	--	26	1,326	--	--
WE2XGR/1	2,293	473	473	--	1,286	975
WE2XGR/2	3,771	4,137	1,407	4,735	1,209	3,379

WE2XGR/3	1,094	3,700	1,476	4,650	671	670
WE2XGR/5	174	527	--	--	--	174
WE2XGR/6	4,253	1,205	--	4,870	3,139	3,713
WE2XGR/8	238	--	--	--	--	238
WA2XRM	623	2,441	--	--	--	--
WE2XPQ	96	1,335	--	--	--	--
WF9HIX	--	--	--	--	922	--
VX9BDQ	2,695	2,461	--	2,086	--	--
VX9MRC	2,532	3,106	--	1,071	--	2,532
VX9ZZZ	2,505	--	--	--	--	2,505

*NOTE: AUTO includes PC-based beacon modes WSPR/WOLF/OPERA/ROS/JT65, etc., which are not being used for QSOs.