

WD2XSH status report: March 1 - May 31, 2009**Prepared by Fritz Raab, W1FR, Experiment Coordinator****July 1, 2009****1. SUMMARY OF OPERATIONS**

This report provides a summary of WD2XSH activity during the spring of 2009. The key statistics of our operations to date are:

- Number of QSOs: 1 additional, total 336;
- Number of reports via web site: 494 additional, total 8632;
- Operating hours: 1,051 additional, total 34,527; and
- Number of interference complaints: 0.

All statistics are based upon the end of the reporting period (05/31/09).

2. ADMINISTRATIVE

On or about April 6, ARRL attorney Chris Imlay spoke with the FCC about the delay in processing our request for expansion. The FCC was worried about the large number of stations and feared that we were creating a new service through the experimental license. The ARRL attorney assured them that we were indeed going to be conducting experiments and that we would use the rule-making process at some future date to seek a domestic allocation. The FCC asked for a supplement explaining this to be filed. The letter was filed on May 21 and posted on the OET web site on June 5.

The FCC subsequently advised the ARRL attorney on or about May 31 that they were agreeable to everything in our request except for communication with foreign amateur/experimental stations. As OET sees it, they have no authority to deal with international communications. The FCC offered expedient processing if this part of our request was withdrawn, and we agree. The author sent a revised experiment description to the ARRL. As of the date of this report, it either has not been filed or has not been posted on the FCC web site, and our request for modification remains "pending."

3. COMMUNICATIONS

Activity has slowed down somewhat with the increasing noise levels. Propagation conditions have, however, remained generally good with a number of long-distance receptions. Most of our activity has come from stations /6 and /12.

Processing of the ground-wave data from last summer is still pending.

4. INTERFERENCE

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

NDB OF

Signal-strength data collected by K0HW during the winter months was processed by the author to obtain comparisons of the signal levels of our stations to those of NDB OF (Norfolk, NE) at the edge of its service area. Signal levels were measured at two different times twice per week. Signal levels within a given session were averaged. The average signal levels of NDB OF corrected for ground-wave propagation from the edge of the service area to K0HW and then subtracted from the average signal levels of the WD2XSH stations. The results (Figure 1) shown that all of our stations are within FAA guidelines (15-dB difference in signal level), and would be within FAA limits even if the midwest stations were operating in the band from 508 to 510 kHz. The complete analysis is presented in [RN09-2].

NEED

We continue to hear NEED on 505 kHz from time to time.

SBQ

There have been no further reports of this signal.

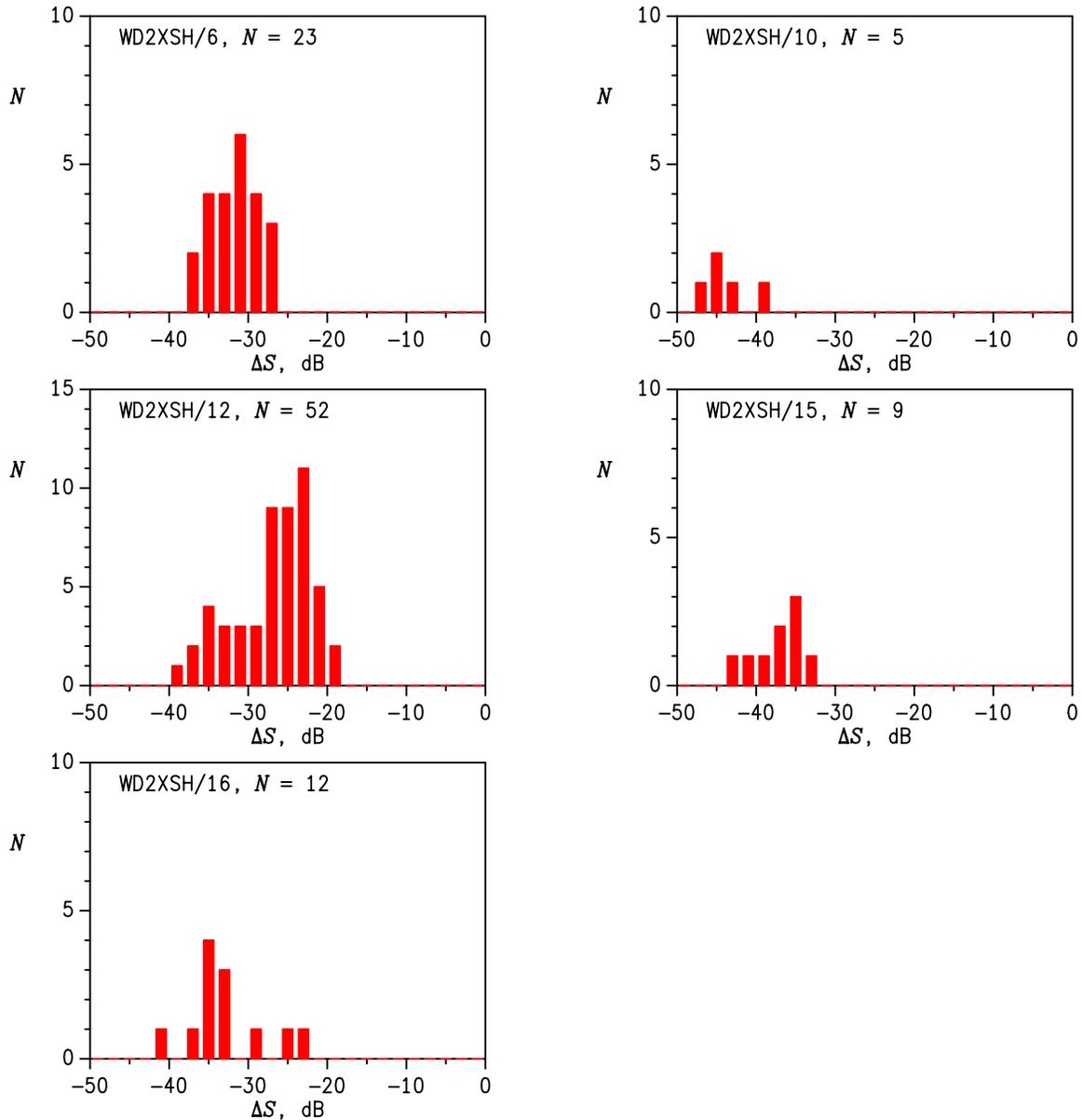


Figure 1. Relative signal levels of WD2XSH stations and NDB OF at K0HW.

5. 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.

Michael Gray, KD7LMO, was killed on April 12 while bicycling in Maricopa, Arizona. Michael was recently issued experimental license WE2XVY for operation from 500 to 510 kHz.

Mike Reid's experimental license WD2XGI was renewed on May 15. His request for operation from 501 to 509 kHz was dropped without comment or question from OET.

Experimental license WF2XAU was issued to Roy Croston AB4OM (Orlando, FL) on June 23. He is authorized to transmit 10 W ERP on frequencies from 505 to 510 kHz. The authorization runs only through January 1, 2010.

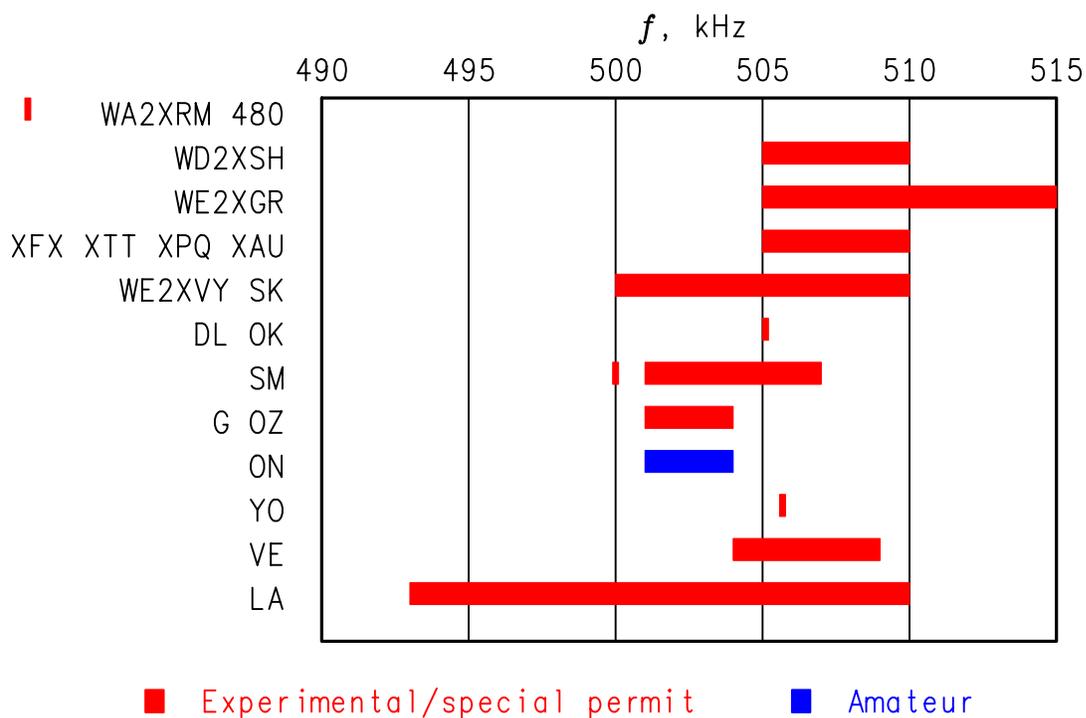


Figure 2. Worldwide amateur activity at 500 kHz.

6. INTERNATIONAL AMATEUR ACTIVITIES

The allocations for non-USA amateur/experimental stations are given in Appendix C.

International Marconi Day was celebrated on April 25 and included 600-meter operation for the first time. GB4FPR was operated from the Fort Perch Rock Marine Radio Museum in the Wirral. They managed a transatlantic crossband QSO with station V01MRC in St. John's, Newfoundland. GB4FPR operated on 502 kHz while V01MRC operated on 3566 kHz. This QSO simulated Marconi's original trans-Atlantic QSO.

The proposed Norwegian amateur/heritage band has been reduced to 493 - 510 kHz to avoid interference with NAVTEX. The initial term of amateur operation will be through December 31, 2011. Only CW operation will be permitted. Comments are due by September 11.

On or about June 22, OZ8NJ (Denmark) received permission for experimental operations from 501 to 504 kHz with 20-W ERP. He has already been received in the UK.

7. HERITAGE (MUSEUM) OPERATIONS

The Maritime Radio Historical Society is planning the tenth Night of Nights on July 12. Appendix D gives a list of known US heritage stations.

On June 18, Norwegian coastal station LGQ in Rogaland and LM500LGN in Bergen made a QSO on 500 kHz. LM500LGN is a special heritage license arranged by the NRRL and Norkram. This is the first issuance of a license specifically for heritage operations.

8. REGULATORY AND WRC-11

At the IMO COMSAR meeting held in London in January 2009, the IMO acknowledged proposals to preserve 500 kHz for heritage operations, but stated that there were better uses of 500 kHz in the future. They also stated that they did not want to lose access to this band. The applicable text appears in Appendix E.

The author believes that there is plenty of room between 435 and 490 kHz and from 510 to 526 kHz for new NAVTEX stations and other new maritime services. These bands are currently allocated for maritime telegraphy and NAVTEX. Frequencies near the present NAVTEX frequencies would be ideal and could provide many more channels than will be available from 495 to 505 kHz. In fact, it appears that two new Norwegian NAVTEX stations are operating on 489 kHz. The new NAVTEX stations and new maritime stations can easily coexist with the few NDBs currently operating in these bands, and these bands will be vacated over the next ten years as the NDBs are decommissioned. In contrast, amateurs will have a more difficult time coexisting with the NDBs. Those involved in the WRC process need to bring this concept to the table so that both maritime and amateur interest for MF can be satisfied.

Colin Thomas G3PSM has been appointed CEPT co-ordinator for WRC-11 Agenda Item 1.23.

WRC-11 has now become WRC-12 and is scheduled for early 2012.

In May, NDB GCT (Grundy Center, Iowa) moved from 518 to 516 kHz. GCT had been operating on the NAVTEX frequency for years without problems, so the reason for this move is unclear.

9. PORTABLE STATION

W0RPK reports that the portable station is ready to test as soon as the license expansion is issued.

10. PLANS

There are no specific plans for experimentation this summer. The author hopes to process the data from last summer's ground-wave tests. We are also hoping the modification will be issued and the new stations can start getting their equipment in order.

APPENDIX A. STATISTICS

STATION	CALL	STATUS	08/31/08		11/30/08		COMMENT
			HOURS	QSOs	HOURS	QSOs	
WD2XSH/1	W1NZR	ON	13:36	7	13:36	7	Inactive
WD2XSH/2	W5TVW	OFF	12:31	22	12:31	22	Inactive
WD2XSH/3	WD5CVG	DROPPED	-	-	-	-	Dropped
WD2XSH/4	WD4PLI	DROPPED	-	-	-	-	Dropped
WD2XSH/5	KW1I	ON	24:07	48	24:07	48	
WD2XSH/6	W5THT	ON	4590:20	111	4899:36	115	
WD2XSH/7	W5JGV	MOVED	-	-	-	-	Moved
WD2XSH/8	N4ICK	OFF	0	0	0	0	Inactive
WD2XSH/9	W2ILA	ON	9:37	26	9:37	26	Inactive
WD2XSH/10	W4DEX	ON	1233:46	28	1233:46	24	
WD2XSH/11	WS4S	OFF	809:42	12	809:42	12	Inactive
WD2XSH/12	AI8Z	ON	11814:19	22	13278:24	23	
WD2XSH/13	KOJO	OFF	997:00	7	997:00	7	SK
WD2XSH/14	W1FR	ON	224:21	5	233:45	6	
WD2XSH/15	W5OR	ON	4131:33	2	4131:33	2	
WD2XSH/16	WE0H	ON	871:45	12	884:35	11	
WD2XSH/17	AA1A	ON	772:49	23	722:49	23	Inactive
WD2XSH/18	N1EA	OFF	3935:00	0	3935:00	0	Inactive
WD2XSH/19	K9EUI	ON	1313:51	3	1313:51	3	
WD2XSH/20	N6LF	OFF	1963:12	7	1963:12	7	Inactive
WD2XSH/21	WORW	DROPPED	652:42	0	652:42	0	Dropped
WD2XSH/22	WB2FCN	MOVED	-	-	-	-	Ready
WD2XSH/23	K2ORS	OFF	110:11	0	110:11	0	QRT Order
TOTAL	02/28/09	8 ON	33,476	335			
TOTAL	05/31/09	10 ON	34,527	336			

Note:

Operating hours and QSOs are derived from logs through May 31, 2009. The statistics in this appendix were compiled by Rudy Severns N6LF using the Excel logs submitted by the stations. Several stations are subject to a QRT order for not being current in submitting their logs. These stations are required to remain QRT until they

have rectified the situation. Generally, these stations have an equipment problem or some other problem that keeps them from operating. Two stations moved from the location specified on our original license. They are ready to go on the air as soon as the modification is approved. Some changes (such as a decrease in the number of QSOs) are the result of corrections to the logs.

APPENDIX B. US EXPERIMENTAL LICENSES

CALL	NUMBER	QTH	f, kHz	ERP, W	DATES
WA2XRM	1	CO	480	100	01/01/09 - 01/01/14
WD2XSH	20	CONUS	505 - 510	20	09/13/06 - 08/01/10
WE2XGR	5	New Engl and	505 - 515	200	09/05/07 - 09/01/12
WE2XFX	1	OK	505 - 510	20	07/27/07 - 10/21/08
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(SK)	1	AZ	500 - 510	200	12/09/08 - 12/01/10
WF2XAU	1	FL	505 - 510	10	06/23/09 - 01/01/10

* RF output to antenna

APPENDIX C. FOREIGN AMATEUR/EXPERIMENTAL BANDS

COUNTRY	TYPE	BAND, kHz	ERP, W
Sweden	NoV	500, 501 - 507	20
Germany	Exp	505.0 - 505.2	9
Czech Republic	Exp	505.60	1
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	Exp	501 - 504	20

APPENDIX D. HERITAGE STATIONS

CATEGORY	CALLSIGN	FREQUENCIES	OPERATOR / QTH
Coastal	KSM	500, 426	MRHS, Bolinas, CA
	KFS		
	KPH	599, 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	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		LST325
	NTTH	500, 512	USS Cassin Young, Charleston, MA
Foreign	LGQ	493 - 510	Rogaland, Norway
	LM500LGN	493 - 510	Bergen, Norway

APPENDIX E. RESOLUTIONS FROM THE JANUARY 2009 IMO COMSAR MEETING

4.75 The Sub-Committee recalled that, at COMSAR 12, it had considered the proposal by IFSMA to preserve the heritage of the important frequency 500 kHz, and that it was considered that this frequency could be better used in future. The Sub-Committee had also considered it necessary to be very careful not to lose access to this very important frequency band, currently controlled in the maritime environment.

4.76 The Sub-Committee noted that WP 5B had sent a liaison statement to WP 5A on studies related to WRC-11 Agenda item 1.23 stating that, prior to identification of preferred frequency bands for secondary amateur allocations in the 415-526.5 kHz bands, the maritime service must first consider existing and future requirements for ship and port safety spectrum in existing maritime spectrum to solve Agenda item 1.10. It was also noted that the band was also under study for the provision of future systems for enhancing of safety of navigation at sea (e-navigation applications).