WBCQ Propagation Models January 2021



WBCQ 274 Britton Road Monticello, Maine 04760 USA http://wbcq.com



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1 Introduction



This report provides shortwave propagation models for transmissions originating from WBCQ, an international shortwave broadcasting station located in Monticello, Maine, USA. Models are provided for each frequency and time of day that WBCQ is authorized to operate. The time of day is given in Universal Coordinated Time (UTC). For WBCQ's service on 9.330 MHz, the models are based on the transmitter power and antenna beam direction, which varies throughout each broadcast day. The models provide propagation predictions for January 2021.

2 6.160 MHz

WBCQ is licensed for 24 hour operation on 6.160 MHz, 50 KW, beam 245 degrees.



areadata



















































Monticello, Maine [HY/.5/.25] 50kW 245deg 09ut 6.160MHz Jan 9ssn areadata areadata default\6160-1-9.V19







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Monticello, Maine [HY/.5/.25] 50kW 245deg 12ut 6.160MHz Jan 9ssn areadata areadata default\6160-10-18.V13





Monticello, Maine [HY/.5/.25] 50kW 245deg 13ut 6.160MHz Jan 9ssn areadata areadata default\6160-10-18.V14





Monticello, Maine [HY/.5/.25] 50kW 245deg 14ut 6.160MHz Jan 9ssn areadata areadata default\6160-10-18.V15





Monticello, Maine [HY/.5/.25] 50kW 245deg 15ut 6.160MHz Jan 9ssn areadata areadata default\6160-10-18.V16





Monticello, Maine [HY/.5/.25] 50kW 245deg 16ut 6.160MHz Jan 9ssn areadata areadata default\6160-10-18.V17



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Monticello, Maine [HY/.5/.25] 50kW 245deg 17ut 6.160MHz Jan 9ssn **DBU** ta areadata\default\6160-10-18.V18



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Monticello, Maine [HY/.5/.25] 50kW 245deg 18ut 6.160MHz Jan 9ssn areadata areadata default\6160-10-18.V19





Monticello, Maine [HY/.5/.25] 50kW 245deg 19ut 6.160MHz Jan 9ssn areadata areadata default\6160-19-24.V11





Monticello, Maine [HY/.5/.25] 50kW 245deg 20ut 6.160MHz Jan 9ssn areadata areadata default\6160-19-24.V12





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Monticello, Maine [HY/.5/.25] 50kW 245deg 21ut 6.160MHz Jan 9ssn areadata areadata default\6160-19-24.V13



Monticello, Maine [HY/.5/.25] 50kW 245deg 22ut 6.160MHz Jan 9ssn areadata areadata default\6160-19-24.V14

24

Monticello, Maine [HY/.5/.25] 50kW 245deg 23ut 6.160MHz Jan 9ssn areadata areadata default\6160-19-24.V15

Monticello, Maine [HY/.5/.25] 50kW 245deg 24ut 6.160MHz Jan 9ssn areadata areadata default\6160-19-24.V16

3 7.490 MHz

WBCQ is licensed for operation on 7.490 MHz from 1900 to 0400 UTC, 50 KW, beam 245 degrees.

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4 5.130 MHz

WBCQ is licensed for 24 hour operation on 5.130 MHz, 50 KW, beam 245 degrees.





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NTIA/ITS

Monticello, Maine [HY/.5/.25] 50kW 245deg 13ut 5.130MHz Jan 9ssn DBU areadata areadata default\5130-10-18.V14





Monticello, Maine [HY/.5/.25] 50kW 245deg 14ut 5.130MHz Jan 9ssn BU areadata areadata areadata\default\5130-10-18.V15





Monticello, Maine [HY/.5/.25] 50kW 245deg 15ut 5.130MHz Jan 9ssn areadata areadata default\5130-10-18.V16



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Monticello, Maine [HY/.5/.25] 50kW 245deg 17ut 5.130MHz Jan 9ssn areadata areadata default\5130-10-18.V18





Monticello, Maine [HY/.5/.25] 50kW 245deg 18ut 5.130MHz Jan 9ssn BU areadata areadata areadata\default\5130-10-18.V19



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NTIA/ITS















5 3.265 MHz

WBCQ is licensed for operation on 7.490 MHz from 2200 to 0400 UTC, 50 KW, beam 245 degrees.































































NTIA/ITS
6 9.330 MHz

WBCQ is licensed for 24 hour operation on 9.330 MHz.

- 0100-0400 UTC: 250 KW, 270 degrees
- 0400-0500 UTC: 500 KW, 70 degrees
- 0500-0900 UTC: 250 KW, 270 degrees
- 0900-1000 UTC: 500 KW, 76 degrees
- 1000-1100 UTC: 500 KW, 76 degrees
- 1100-1300 UTC: 500 KW, 180 degrees
- 1300-1400 UTC: 250 KW, 220 degrees
- 1400-1600 UTC: 250 KW, 300 degrees
- 1600-1800 UTC: 500 KW, 57 degrees
- 1800-1900 UTC: 500 KW, 54 degrees
- 1900-2300 UTC: 500 KW, 81 degrees
- 2300-2400 UTC: 500 KW, 175 degrees





Monticello, Maine [HR 4/4/1] 250kW 270deg 02ut 9.330MHz Jan 9ssn areadata areadata default\9330-01-03.V12



NTIA/ITS

Monticello, Maine [HR 4/4/1] 250kW 270deg 03ut 9.330MHz Jan 9ssn areadata areadata default\9330-01-03.V13



NTIA/ITS

Monticello, Maine [HR 4/4/1] 500kW 70deg 04ut 9.330MHz Jan 9ssn ta areadata\default\9330-04.V11







Monticello, Maine [HR 4/4/1] 250kW 270deg 05ut 9.330MHz Jan 9ssn **DBU** areadata\default\9330-05-08.V11





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Monticello, Maine [HR 4/4/1] 250kW 270deg 06ut 9.330MHz Jan 9ssn areadata\default\9330-05-08.V12





Monticello, Maine [HR 4/4/1] 250kW 270deg 07ut 9.330MHz Jan 9ssn **DBU** areadata\default\9330-05-08.V13





Monticello, Maine [HR 4/4/1] 250kW 270deg 08ut 9.330MHz Jan 0ssn areadata\default\9330-05-08.V14





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Monticello, Maine [HR 4/4/1] 500kW 180deg 11ut 9.330MHz Jan 9ssn **DBU** areadata\default\9330-11-12.V11







Monticello, Maine [HR 4/4/1] 500kW 180deg 12ut 9.330MHz Jan 9ssn DBU areadata\default\9330-11-12.V12







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Monticello, Maine [HR 4/4/1] 250kW 220deg 13ut 9.330MHz Jan 9ssn areadata\default\9330-13.V11



















NTIA/ITS





NTIA/ITS













NTIA/ITS

















Monticello, Maine [HR 4/4/1] 500kW 175deg 23ut 9.330MHz Jan 9ssn DBU areadata\default\9330-23-24.V11









Monticello, Maine [HR 4/4/1] 500kW 175deg 24ut 9.330MHz Jan 9ssn DBU areadata\default\9330-23-24.V12









7 Notes

- 1. These models were generated using VOACAP (Voice of America Coverage Analysis Program), high-frequency (HF) propagation prediction software from NTIA/ITS, originally developed for Voice of America (VOA) (https://www.voacap.com/).
- 2. Sunspot number predictions were taken from National Oceanic and Administration Space Weather Prediction Center, United States Department of Commerce (https: //www.swpc.noaa.gov/products/predicted-sunspot-number-and-radio-flux).
- 3. License data for WBCQ is from the United States Federal Communications Commission (https://transition.fcc.gov/ib/sand/neg/hf_web/WBCQ.txt).
- 4. Schedules and frequencies for the B20 season is from the High Frequency Co-ordination Conference (http://www.hfcc.org/data/guidepost.phtml).