

## Modification of Experimental License WB2XCA

By this application, XM Radio Inc. (“XM”) seeks to modify its existing experimental license -- call sign WB2XCA (the “License”) -- to add the band 2320-2332.5 MHz to the frequencies currently authorized under the License. This modification would change no specifications of the License other than also allowing use of the satellite radio spectrum band 2320-2332.5 MHz in addition to the satellite radio band currently authorized under the License, 2332.5-2345 MHz. XM is now a wholly-owned subsidiary of Sirius XM Radio Inc., thereby consolidating control of the entire 2320-2345 MHz band under a single entity.

### Background

In 1999, the Commission granted XM a limited experimental license to operate non-permanent terrestrial repeaters in XM’s licensed spectrum (2332.5-2345 MHz) to assist in the planning and deployment of XM’s permanent terrestrial repeater network.<sup>1</sup> In 2000, the Commission broadened the License to permit XM to operate experimental terrestrial repeaters nationwide.<sup>2</sup> The License was renewed for a second five-year term in September 2005.<sup>3</sup>

In 2008, XM merged with Sirius Satellite Radio Inc. (“Sirius”) and control of the License was transferred to Sirius, the name of which was changed to Sirius XM.<sup>4</sup>

### Request for Modification

XM seeks to modify the License to include the entirety of the satellite radio spectrum band now licensed to Sirius XM. Specifically, XM seeks to add the band 2320-2332.5 MHz to the License. Granting this modification will serve the public interest for the same reasons as the current license serves the public interest: the modification will permit Sirius XM to design, develop, test and demonstrate its terrestrial repeater network, take field-test measurements of installed system performance, and conduct field validation and testing of next generation repeater equipment across the entire satellite radio band.<sup>5</sup> These tests will allow Sirius XM to optimize its repeater network and test

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<sup>1</sup> See OET File No. 0199-EX-PL-1999 (granted Aug. 17, 1999).

<sup>2</sup> See OET File No. 0160-EX-ML-2000 (granted Aug. 23, 2000).

<sup>3</sup> See OET File No. 0094-EX-RR-2005 (granted Sep. 1, 2005).

<sup>4</sup> See OET File No. 0005-EX-TU-2007 (granted August 15, 2008).

<sup>5</sup> XM anticipates that it will experiment with no more than 20 different transmitters during an optimization exercise in a single market and it will do so using yet to be determined experimental and non-experimental equipment. This is similar to the manner in which XM currently operates under the License.

innovative repeater designs and potential repeater locations prior to commencing commercial terrestrial operation in a particular market. Modification of the License will therefore enhance performance of the terrestrial repeater network and improve the quality of service to satellite radio listeners.

XM is proposing no changes to the technical parameters of the License, other than expanding the frequency band of operation. Consistent with this limited change, XM also requests that the Commission maintain the two special conditions currently imposed on the License. These special conditions authorize XM to use various emissions and bandwidths during the experiment and, in lieu of imposing a frequency tolerance specification, require that the occupied bandwidth of the emission not extend beyond the band limits set forth in the authorization.

XM has never received a complaint of interference arising from its experimental operations under the License and does not anticipate any future complaints in the event the Commission grants the requested modification. These tests will be conducted using only Sirius XM's licensed spectrum, will be of limited duration and power, and will be conducted under the supervision of Sirius XM personnel. Nevertheless, Sirius XM personnel will promptly address any instances of interference, in the unlikely event such interference should occur.<sup>6</sup>

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<sup>6</sup> Sirius XM's National Repeater Control Center (202-380-4725) is available on a continuous basis to receive any reports of any suspected interference and take immediate corrective action.