## FEDERAL COMMUNICATIONS COMMISSION 445 12th STREET, SW WASHINGTON, DC 20554

MEDIA BUREAU AUDIO DIVISION APPLICATION STATUS: (202) 418-2730 HOME PAGE: www.fcc.gov/mb/audio/ PROCESSING ENGINEER: Jerome J. Manarchuck TELEPHONE: (202) 418-7226 GROUP FACSIMILE: (202) 418-1411 INTERNET ADDRESS: Jerome.Manarchuck@fcc.gov

July 6, 2018

Kenneth E. Satten, Esq. Wilkinson Barker Knauer, LLP 1800 M. Street, NW Suite 800N Washington, DC 20036

> Re: WWFD(AM), Frederick, Maryland Washington DC FCC License Sub, LLC Facility ID Number 47104 File Number 20180628AAI

> > **Request for Experimental Authority**

## Dear Counsel:

This letter is in reference to the request filed June 28, 2018, on behalf of Washington DC FCC License Sub, LLC ("WDFL"), for an experimental authorization to conduct testing of all-digital AM transmission technology. The digital mode of operation to be employed is "MA3", as defined in the inband/on-channel (IBOC) Digital Radio Broadcasting Standard (NRSC-5-D) developed by the National Radio Systems Committee (NRSC). WDFL is the licensee of standard broadcast station WWFD(AM), Frederick, Maryland, and it proposes to conduct the experimental operation using both the daytime and nighttime facilities of the station. WDFL requests that the experimental authorization be effective for a period of 1 year commencing on or before July 16, 2018.

Station WWFD(AM) is a Class B AM station licensed to operate on 820 kilohertz ("kHz") with 4.3 kilowatts (kW) daytime nominal power and 0.43 kW nighttime nominal power using a directional antenna pattern at night.<sup>2</sup> WDFL proposes to conduct the experimental operation using the currently operating station WWFD(AM) facilities. WDFL states that the digital power level will be equivalent to and not exceed the analog power level by more than 5% of the maximum power authorized. WDFL states that representatives of Xperi, Kintronic Laboratories, Cavell, Mertz & Associates, Inc. and senior station engineering personnel will confirm proper adjustment of the exciter and associated RF systems to assure optimum all-digital transmission and compliance with the Commission's Rules regarding occupied bandwidth and spurious emissions. WDFL further states that the purpose of the tests to be undertaken will be multifocal, involving demonstrations of representative equipment, methods and techniques, subjective coverage testing, and assessing the increasing potential for the general public to readily receive all digital AM transmissions with commercially-available receivers.

<sup>&</sup>lt;sup>1</sup> National Radio Systems Committee NRSC-5-C In-band/on-channel Digital Radio Broadcasting Standard, September 2011; Doc. No. SY\_SSS\_1082s rev. F, HD Radio AM Transmission System Specifications, iBiquity Digital Corporation, 8/24/11.

<sup>&</sup>lt;sup>2</sup> FCC File Number BL-19910827AC.

Our review indicates that the proposed experimental operation meets the requirements of Section 5.203 of the Commission's Rules,<sup>3</sup> and is not likely to cause interference to any other station. We find that the public interest would be served by the knowledge gained through further testing of the "MA3" inband/on-channel all-digital AM transmission system. Although the analog AM broadcast service provided by station WWFD(AM) must be discontinued during the time that the all-digital AM transmission system is being tested, the Frederick community is well served by other AM and FM radio stations.

Accordingly, the request for experimental authority IS HEREBY GRANTED. Station WWFD(AM) may operate with an all-digital AM signal as described above. Operation under this authority shall be terminated if complaints of interference are received, unless the interference can be eliminated immediately by power reduction or other means. WDFL shall employ whatever means are necessary to prevent excessive exposure of workers or the public to radio frequency radiation, pursuant to Section 1.1310 of the Commission's Rules.<sup>4</sup> Within 60 days following completion of the experimental operation authorized herein, WDFL shall file a full report detailing the research, experimentation and results of the testing with the Commission, pursuant to Section 5.203(d) of the Commission's Rules.<sup>5</sup>

This authorization expires on July 6, 2019.

Sincerely,

Jerome J. Manarchuck Electronics Engineer

Audio Division Media Bureau

cc: Washington DC FCC License Sub, LLC

<sup>&</sup>lt;sup>3</sup> 47 C.F.R. § 5.203. Effective May 29, 2013, 47 C.F.R. § 73.1510 was deleted, and experimental authorizations for licensed broadcast stations are now governed by 47 C.F.R. § 5.203.

<sup>&</sup>lt;sup>4</sup> 47 C.F.R. § 1.1310.

<sup>&</sup>lt;sup>5</sup> 47 C.F.R. § 5.203.