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December 19, 2018

Marlene H. Dortch, Esq.
Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, DC 20554
ATTN: Media Bureau, Audio Division

Accepted / Filed

DEC 19 2018

Federal Communications Commission
Office of the Secretary

Re: Request for Extension of Experimental Authorization
Georgia Public Telecommunications Commission
NCE Station WJSP-FM, Warm Springs, GA (Fac. ID 23927)

Dear Ms. Dortch:

On behalf of Georgia Public Telecommunications Commission ("GPTC"), licensee of noncommercial educational radio station WJSP-FM, Warm Springs, Georgia, we respectfully request a twelve (12) month extension, up to and including January 25, 2020, for the experimental authorization previously granted to allow testing of hybrid digital FM in-band on-channel ("IBOC") operation with asymmetrical power levels in the digital sidebands. *See* FCC File No. 20171219AEY. This request is submitted pursuant to Section 5.203, *et. seq.*, of the FCC's Rules, 47 C.F.R. §5.203.

The FCC granted the initial experimental authorization for this operation by letter dated January 23, 2015 (FCC File No. 20130617ACS), and most recently granted an extension on January 25, 2018 (File No. 20171219AEY, copy enclosed). The authorization is currently due to expire on January 25, 2019. In connection with this request for extension of the experimental authorization, GPTC provides the enclosed interim report detailing progress, methodology employed and the results obtained in connection with WJSP-FM's authorized IBOC operation with asymmetrical power levels in the digital sidebands.

GPTC respectfully submits that the public interest will be well served by the requested extension for WJSP-FM's continued experimental authorization by permitting GPTC to obtain additional experience and continue to provide improved service to its local community with IBOC operation including asymmetrical power levels in the digital sidebands.

GPTC hereby certifies that GPTC, nor any party to the application, is subject to denial of federal benefits pursuant to Section 5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. Section 862. Should any questions arise concerning this matter, kindly contact this office.

Sincerely,

Barry Persh

Barry S. Persh

Enclosures
cc: Susan N. Crawford, FCC (Susan.Crawford@fcc.gov)

TECHNICAL STATEMENT OF JEFFREY C. GEHMAN OF THE FIRM OF KESSLER AND GEHMAN ASSOCIATES, INC., CONSULTING ENGINEERS IN SUPPORT OF THE FILING BY GEORGIA PUBLIC TELECOMMUNICATIONS COMMISSION REGARDING A REQUEST FOR EXTENSION OF EXPERIMENTAL AUTHORIZATION TO OPERATE ITS WJSP FM STATION WITH ASYMMETRICAL HD RADIO SIDEBANDS

This Technical Statement has been prepared in support of the filing by Georgia Public Telecommunications Commission ("GPTC") to request extension of the experimental authorization to operate asymmetrical FM HD sidebands at its Warm Springs GA station WJSP.

On December 17th, 2018 a field observations campaign was performed by Jeffrey C. Gehman to compare WJSP FM's licensed -14 dB symmetrical HD Radio sidebands to its current experimental authorization's asymmetrical sidebands of -14 dB upper sideband and -10 dB lower sideband and record the real-world difference of the higher-powered lower sideband.

A 188-mile route was pre-established from the southern extent of WJSP coverage area past the WJSP transmit site to its northern coverage area extent, along with convenient, safe pull-off sample locations along the route spaced approximately every 5 miles. The route was then driven twice on the same day (12/17/18), once from south-to-north while the station's transmitter was set to the licensed -14 dB symmetrical HD Radio sidebands, and then again from north-to-south while the station's transmitter was set to the experimental authorization's asymmetrical sidebands of -14 dB upper sideband and -10 dB lower sideband. For both drives the transmitter output power was set at 100%. The WJSP signal was observed using the stock stereo receiver head unit in a 2019 Cadillac XT5 with HD Radio. A chart of the results is included below as Figure 1. These results demonstrate that a significant improvement in HD reception was observed and logged over an approximately 10-mile stretch in the SE portion of the coverage area in the vicinity of Vienna/Lilly/Byromville, GA and the 15-mile stretch in the northern portion of the coverage area in the vicinity of Atlanta and Sandy Springs, GA.

Legend for Figure 1

Observation rating 1 = No WJSP FM signal at all or very poor
Observation rating 2 = No WJSP FM HD, analog sketchy
Observation rating 3 = No WJSP HD, analog solid
Observation rating 4 = WJSP HD received but unreliable, in and out
Observation rating 5 = WJSP HD perfect / reliable
Sample locations where the Asymmetrical signal was superior

Figure 1

Sample Location #	Logged rating of the observed FM HD reception with -14 dB symmetrical sidebands (100% TPO)	Logged rating of the observed FM HD reception with -14 dB upper sideband and -10 dB lower sideband (100% TPO)	Sample location distance from WJSP TX site (miles)
1	4	4	80.2
2	5	5	76.7
3	2	3	72.5
4	4	5	68.4
5	5	5	64.1
6	5	5	59.0
7	5	5	54.5
8	5	5	50.8
9	5	5	46.5
10	5	5	41.3
11	5	5	37.0
12	5	5	35.3
13	5	5	31.7
14	5	5	27.1
15	5	5	22.8
16	5	5	18.6
17	5	5	14.2
18	5	5	10.4
19	5	5	6.3
20	5	5	2.6
21	5	5	2.0
22	5	5	5.8
23	5	5	10.8
24	5	5	15.7
25	5	5	20.5
26	5	5	25.6
27	5	5	30.5
28	5	5	32.5
29	5	5	37.6
30	5	5	40.7
31	5	5	44.8
32	5	5	48.3
33	5	5	51.6
34	5	5	55.4
35	2	2	59.6
36	2	4	64.9
37	2	4	69.0
38	4	5	75.1
39	2	2	77.3

The attached **Exhibit 1** is a map exhibit showing **1)** the campaign route, **2)** WJSP FM's 60 dBu coverage contour, **3)** an 80-mile radius reference contour which was previously established as the outermost fringe where WJSP FM's analog signal ceases to be received, and **4)** the Sample Locations, including the locations where asymmetrical sideband HD reception was superior to symmetrical sideband reception; these locations are highlighted green.

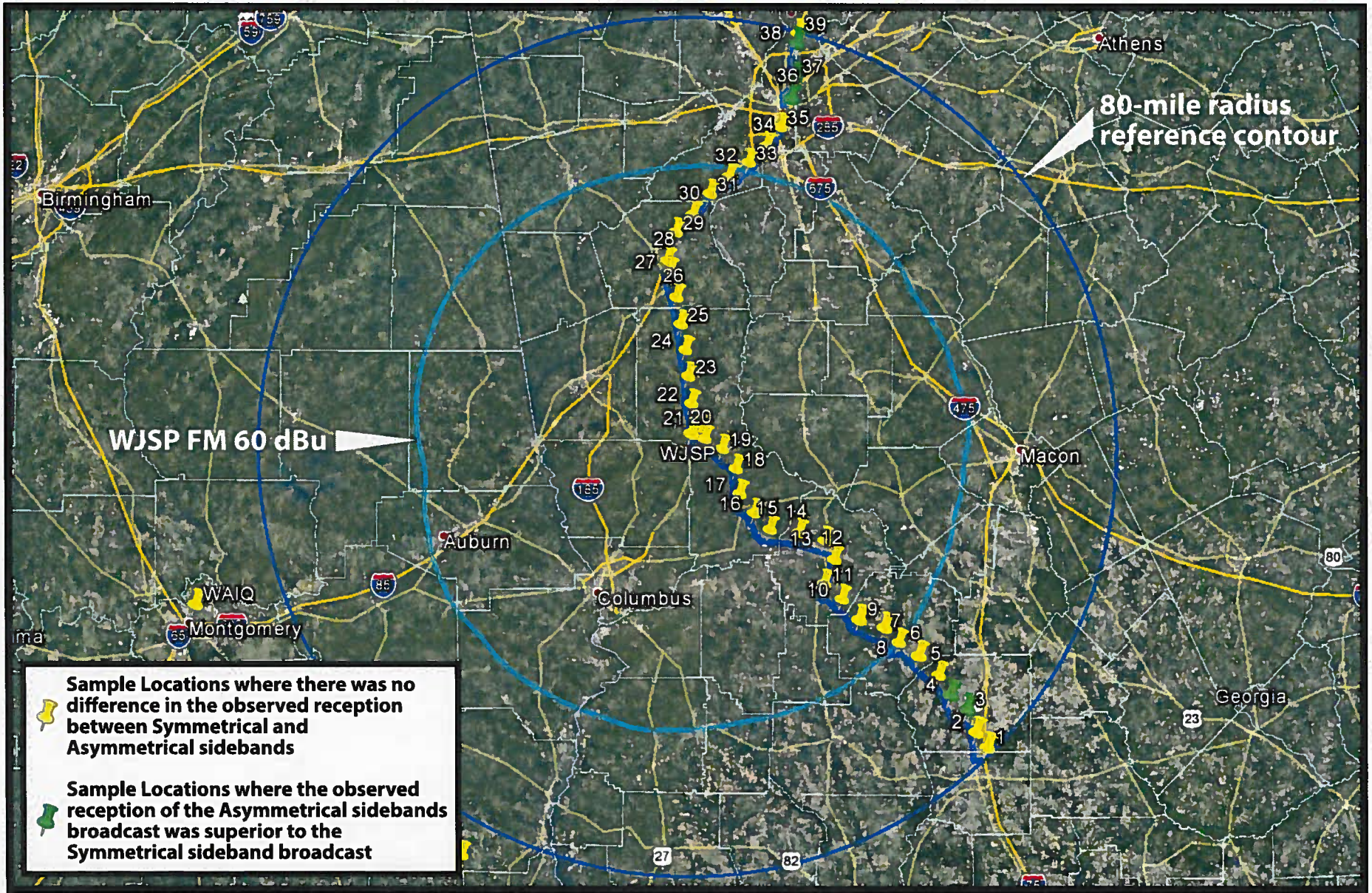
In conclusion, operation of WJSP FM's higher powered -10 dB lower asymmetrical sideband results in a significant reception improvement which more closely replicates WJCT FM's analog reception. Therefore, it is believed that the requested renewal of the experimental authorization is justified.

This technical statement has been prepared by Jeffrey C. Gehman who is an associate of Kessler and Gehman Associates, Inc. with offices in Gainesville, Florida and has been working in the field of radio and television broadcast consulting since 1986. He states under penalty of perjury that the information contained in this statement is true and correct to the best of his knowledge and belief.

KESSLER AND GEHMAN ASSOCIATES, INC.

Jeffrey C. Gehman
Engineering Associate

December 18, 2018



KGA ENGINEERING

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GEORGIA PUBLIC TELECOMMUNICATIONS COMMISSION

WJSP-FM WARM SPRINGS, GEORGIA

20181218

Exhibit 1

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

MEDIA BUREAU
AUDIO DIVISION
APPLICATION STATUS: (202) 418-2730
HOME PAGE: www.fcc.gov/media/radio/audio-division

PROCESSING ENGINEER: Susan N. Crawford
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January 25, 2018

Barry S. Persh, Esq.
Gray Miller Persh LLP
1200 New Hampshire Avenue, NW
Suite 410
Washington, DC 20036

Re: WJSP-FM, Warm Springs, Georgia
Georgia Public Telecommunications Commission
Facility ID No. 23927
File No. 20171219AEY

Request for Extension of Experimental Authority

Dear Counsel:

The staff has under consideration the above-referenced December 19, 2017, request for extension of experimental authority (Request),[1] submitted on behalf of Georgia Public Telecommunications Commission (GPTC), licensee of noncommercial educational FM Station WJSP-FM, Warm Springs, Georgia,[2] to permit WJSP-FM to continue to conduct testing of hybrid FM in-band on-channel (IBOC) operation with asymmetric power levels in the digital sidebands. The experimental authority is requested pursuant to Section 5.203 of the Commission's Rules.[3]

The Request states that GPTC seeks extension of its experimental authority to operate WJSP-FM with lower sideband (LSB) digital effective radiated power (ERP) of -10 dBc[4] and upper sideband (USB) digital ERP of -14 dBc. In support of the Request, as required, GPTC submitted an interim report detailing the methodology employed and the progress and results of its testing under the current experimental authorization. GPTC reports that recent drive testing throughout the WJSP-FM service area showed that there is significant improvement in digital reception resulting from the increased LSB digital ERP operation, and that the improved digital reception closely replicates WJSP-FM's analog reception.

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[1] File No. 20161215ACH (Original underlying experimental authority is File No. 20151216ASL).

[2] File Number BLED-20131101AGM. WJSP-FM, Facility ID No. 23927, is licensed to operate on channel 201C (88.1 megahertz) using 100 kilowatts (kW) effective radiated power (ERP), a circularly polarized directional antenna, and 461 meters antenna radiation center height above average terrain, at a transmitter site described by geographic coordinates 32° 51' 08" North Latitude, 84° 42' 04" West Longitude, referenced to 1927 North American Datum.

[3] 47 CFR § 5.203 (Section 5.203).

[4] Decibels relative to analog carrier.

Our review of the Request indicates that the proposed WJSP-FM experimental operation complies with the contour nonoverlap and other technical requirements of the Media Bureau's Order, adopted January 27, 2010, in Mass Media Docket No. 99-325,[5] and the Request meets the requirements for experimental operations set forth in Section 5.203. Accordingly, the Request **IS HEREBY GRANTED**. Station WJSP-FM may operate with digital ERP as follows:

Analog ERP:	100 kilowatts (kW), Max-DA, H&V[6]
LSB Digital ERP:[7]	5.0 kW
USB Digital ERP:	2.0 kW.

This experimental authority expires on **January 25, 2019**. This authority is specifically conditioned on the lack of objectionable interference. A report detailing the methodology employed and the results obtained must be submitted within 90 days following the conclusion of the experimental operation. Any request for extension of this experimental authority should be filed at least 30 days prior to the expiration date of the authority. Additionally, an extension request must include an interim version of the aforementioned report that details the progress of the experimental operation as of the filing date of the request.

Sincerely,

Susan N. Crawford
Senior Engineer
Audio Division
Media Bureau

cc: Georgia Public Telecommunications Commission

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[5] *See Digital Audio Broadcasting Systems And Their Impact on the Terrestrial Radio Broadcast Service*, Order, 25 FCC Rcd 1182 (MB 2010).

[6] All ERP values rounded in accordance with 47 CFR § 73.212(a).

[7] Digital ERP values shown are for MP1 service mode. The licensee must adjust the station's asymmetric total digital sideband ERP values in accordance with NRSC guideline "NRSC-G202-A, FM IBOC Total Digital Sideband Power for Various Configurations" (April 2016) if operating using a service mode other than MP1.