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December 19, 2017

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 2017

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 26, 2019, 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. 20161215ACH. This request is submitted pursuant to Section 5.203, *et. seq.*, of the FCC’s Rules, 47 C.F.R. §5.203.

GPTC originally applied in June 2013 for this experimental authorization, in FCC File No. 20130617ACS. The FCC granted the experimental authorization by letter dated January 23, 2015, and most recently granted an extension on January 26, 2017 (File No. 20161215ACH, enclosed). The authorization is currently due to expire on January 26, 2018. 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 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 11th, 2017 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 (12/11/17), 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 2017 Cadillac XTS 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 a 35-mile stretch in the SE portion of the coverage area in the vicinity of Montezuma, GA to Cordele, 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	2	4	80.2
2	3	4	76.7

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)
3	2	5	72.5
4	4	5	68.4
5	5	5	64.1
6	3	5	59.0
7	5	5	54.5
8	4	5	50.8
9	4	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	2	64.9
37	2	2	69.0
38	2	2	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 approximately 35-mile stretch to the SE 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.

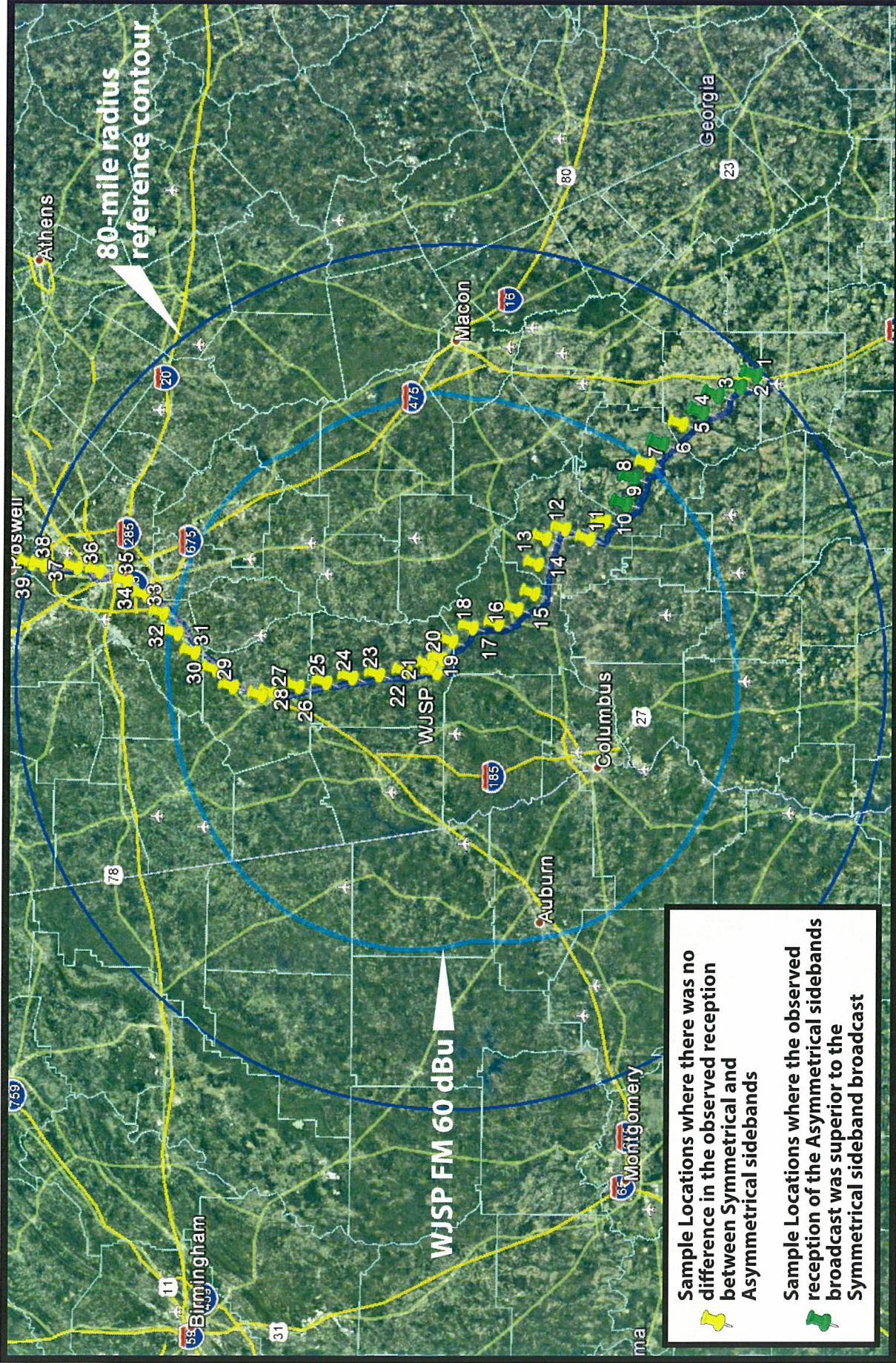
This technical statement has been prepared by Jeffrey C. Gehman who is an associate of Kessler and Gehman Associates, Inc. with offices in Gainesville, Florida and has been working in the field of radio and television broadcast consulting since 1986. He states under penalty of perjury that the information 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 15, 2017



80-mile radius reference contour

WJSP FM 60 dBu

Sample Locations where there was no difference in the observed reception between Symmetrical and Asymmetrical sidebands

Sample Locations where the observed reception of the Asymmetrical sidebands broadcast was superior to the Symmetrical sideband broadcast

GEORGIA PUBLIC TELECOMMUNICATIONS COMMISSION
 WJSP-FM WARM SPRINGS, GEORGIA

20171215

Exhibit 1

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