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May 5, 2020

VIA EMAIL

Marlene H. Dortch, Secretary
Federal Communications Commission
Office of the Secretary
445 12th Street, SW
Washington, DC 20554
Attn: Priscilla Lee, Audio Division, Media Bureau

Re: WJSP-FM, Warm Springs, Georgia; Request for Experimental Authority

Dear Ms. Dortch:

On behalf of Georgia Public Telecommunications Commission (“GPTC”), licensee of noncommercial educational FM radio station WJSP-FM, Warm Springs, Georgia, and pursuant to Section 5.203 of the Commission’s rules, 47 C.F.R. § 5.203, this letter respectfully requests experimental authority for one year to operate WJSP-FM full time with asymmetrical hybrid digital sideband power as set forth in the Technical Statement of Kessler and Gehman Associates, Inc. attached hereto as Exhibit A. GPTC respectfully submits that the public interest will be well served by the requested experimental authorization by permitting GPTC to obtain additional experience and provide improved service to its local community with IBOC operation including asymmetrical power levels in the digital sidebands. Also attached to this letter is a Technical Statement of Kessler and Gehman Associates, Inc., attached hereto as Exhibit B, reporting on the recently concluded experimental authorization of WJSP-FM to operate with asymmetrical hybrid digital sideband power (*see, e.g.*, CDBS File No. 20130617ACS).

GPTC hereby certifies that neither GPTC nor any party to this application is subject to denial of federal benefits pursuant to Section 5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. § 862. GPTC is a noncommercial educational licensee and operates WJSP-FM on a noncommercial basis. Moreover, GPTC qualifies as a governmental entity. The licensee is therefore exempt from FCC filing fee and regulatory fee requirements for WJSP-FM pursuant to Sections 1.116 and 1.1162 of the Commission’s rules.

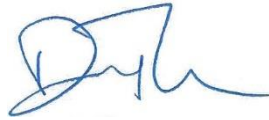
Marlene H. Dortch, Secretary

May 5, 2020

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Please direct any questions regarding this matter to my attention.

Sincerely,

A handwritten signature in blue ink, appearing to read "Derek Teslik". The signature is stylized with a large initial "D" and a long, sweeping underline.

Derek Teslik
Counsel to Georgia Public Telecommunications
Commission

Exhibit A

**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), licensee of noncommercial educational FM Station WJSP-FM, Warm Springs, Georgia,¹ to request permission for WJSP-FM 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.²

GPTC requests experimental authority to operate WJSP-FM with lower sideband (LSB) digital effective radiated power (ERP) of -10 dBc³ and upper sideband (USB) digital ERP of -14 dBc. In support of this request GPTC is submitting the methodology that will be employed for testing under the requested experimental authorization, as follows. Columbus, Georgia, a major community located within the 60 dBu contour, which is located on the Chattahoochee River. The Chattahoochee River is the state border between Georgia and Alabama and the border between the cities of Columbus and Phenix City, Alabama. The terrain elevations vary between 210 feet and 280 feet over short distances, which results in significant terrain shadowing in the areas of Columbus and Phenix City along the riverfront. GPTC will prepare terrain profile graphs and perform drive tests throughout Columbus and Phenix City to determine whether there is significant improvement in digital reception within the terrain shadowed areas resulting from the increased -10 dBc LSB operation compared to the -14 dBc LSB operation.

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 and the request meets the requirements for experimental

¹ 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.

² 47 CFR § 5.203 (Section 5.203).

³ Decibels relative to analog carrier.

Kessler and Gehman Associates, Inc.

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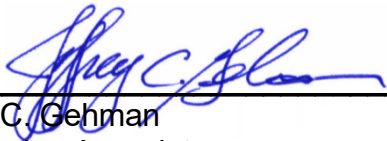
operations set forth in Section 5.203. Accordingly, a request is being made to operate station WJSP-FM with digital ERP as follows:

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

A report detailing the methodology employed and the results obtained will be submitted following the conclusion of the experimental operation.

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

May 1, 2020

Exhibit B

**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 THE CONCLUSION OF
THE 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 conclude the experimental authorization to operate asymmetrical FM HD sidebands at its Warm Springs GA station WJSP-FM.

On April 28th, 2020 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 156-mile route was pre-established from outside the southern extent of WJSP-FM coverage area into and around Columbus GA, along with convenient, safe pull-off sample locations along the route spaced approximately every 14.3 miles outside the urban area and then approximately every 2.7 miles in the combined Columbus GA / Phenix City AL urban area. The route was then driven twice on the same day (4/28/20), 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. The transmitter’s RF output power was set them same for both drives, 18.5 kW. The WJSP-FM signal was observed using the OEM stereo receiver head unit in a 2019 Cadillac XT5 with HD Radio capability. 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 at sample location 6 in Richland GA which is approximately 52.7 miles due south of the WJSP-FM transmit site and 0.4 miles outside the WJSP-FM 60 dBu service contour. It was observed that the WJSP-FM HD signal is robust throughout the Columbus GA / Phenix City AL urban area canvassed during the campaign, with the transmitter set at both its licensed -14 dB symmetrical HD Radio sidebands and its experimental authorization’s asymmetrical sidebands of -14 dB upper sideband and -10 dB lower sideband.

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-FM HD, analog solid
- Observation rating 4** = WJSP-FM HD received but unreliable, in and out

Observation rating 5 = WJSP-FM HD perfect / reliable
Sample location(s) 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-FM TX site (miles)
1	1	1	104.2
2	1	1	90.5
3	1	1	80.7
4	1	1	75.8
5	2	2	66.9
6	3	5	52.7
7	5	5	38.3
8	5	5	33.4
9	5	5	32.1
10	5	5	32.6
11	5	5	32.3
12	5	5	29.4
13	5	5	26.3
14	5	5	26.9
15	5	5	28.6
16	5	5	29.5
17	5	5	31.3
18	5	5	29.0
19	5	5	29.0
20	5	5	23.7

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 location(s) 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 WJSP-FM’s analog reception. Therefore, it is believed that the experimental authorization was justified and successful.

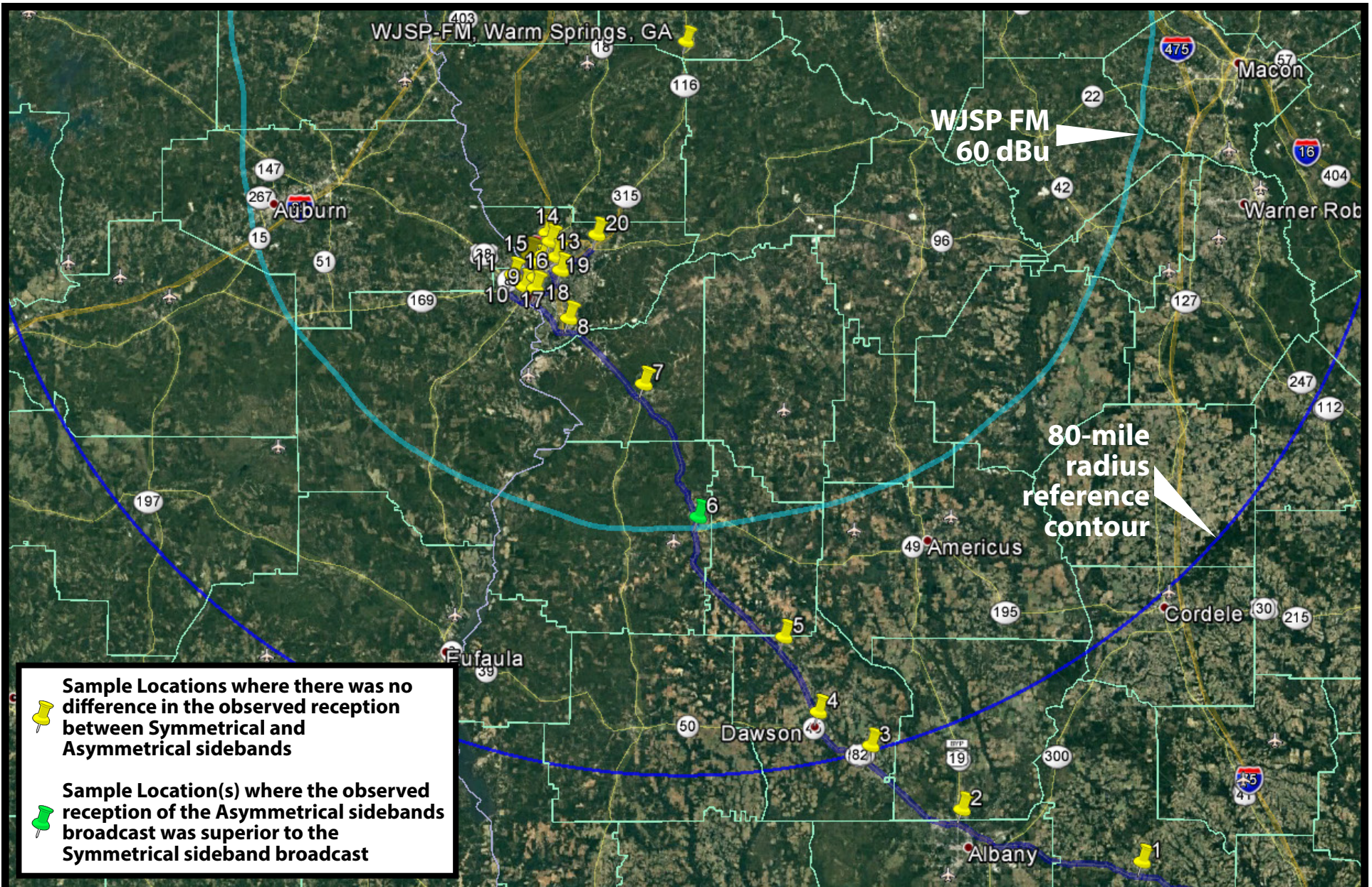
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KESSLER AND GEHMAN ASSOCIATES, INC.




Jeffrey C. Gehman
Engineering Associate

April 28, 2020



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

 Sample Location(s) where the observed reception of the Asymmetrical sidebands broadcast was superior to the Symmetrical sideband broadcast



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GEORGIA PUBLIC TELECOMMUNICATIONS COMMISSION
 WJSP-FM WARM SPRINGS, GEORGIA

20200428

Exhibit 1